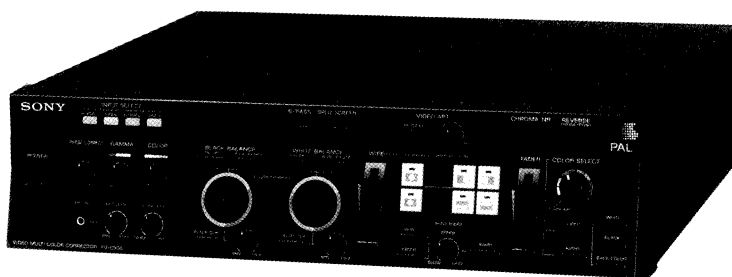


XV-C900

SERVICE MANUAL

*AEP Model
UK Model
Australian Model*



SPECIFICATIONS

Video color system PAL only

S-video input/output

S-VIDEO SOURCE IN (4-pin mini DIN)
S-VIDEO OUTPUT (4-pin mini DIN)
Y-signal: 1 Vp-p, 75 ohms,
unbalanced, sync negative
C-signal: 0.3 Vp-p, 75 ohms,
unbalanced

Video input/output V SOURCE IN 1 and 2 (phono jacks)
V OUTPUT (phono jacks)
1 Vp-p, 75 ohms, unbalanced, sync
negative

Audio input R/L SOURCE IN 1 and 2 (phono jacks)
LINE IN (phono jacks)
Input level: -7.5 dBs (0 dBs =
0.775 Vrms)
Input impedance: More than 47
kilohms
MIC (minijack)
Input level: -66 dBs
Input impedance: More than 3
kilohms

Audio output

R/L OUTPUT (phono jacks)
Output level: -7.5 dBs at 47 kilohms
load
Output impedance: Less than 10
kilohms

Power supply

European model: AC 220V, 50Hz
UK and Australian model: AC 240V,
50Hz

Power consumption

37W

Operating temperature

5°C to 40°C (41°F to 104°F)

Storage temperature

-20°C to 60°C (-4°F to 140°F)

Dimensions

430 x 115 x 425 mm (w/h/d)
(17 x 4 5/8 x 16 3/4 inches)

Weight

7.5 kg (16 lb 9 oz)

Design and specifications subject to change without notice.

VIDEO MULTI COLOR CORRECTOR
SONY®



SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety checks before releasing the set to the customer:

1. Check the area of your repair for unsoldered or poorly-soldered connections. Check the entire board surface for solder splashes and bridges.
2. Check the interboard wiring to ensure that no wires are "pinched" or contact high-wattage resistors.
3. Look for unauthorized replacement parts, particularly transistors, that were installed during a previous repair. Point them out to the customer and recommend their replacement.
4. Look for parts which, though functioning, show obvious signs of deterioration. Point them out to the customer and recommend their replacement.
5. Check the B+ voltage to see it is at the values specified.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY SHADING AND MARK  ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

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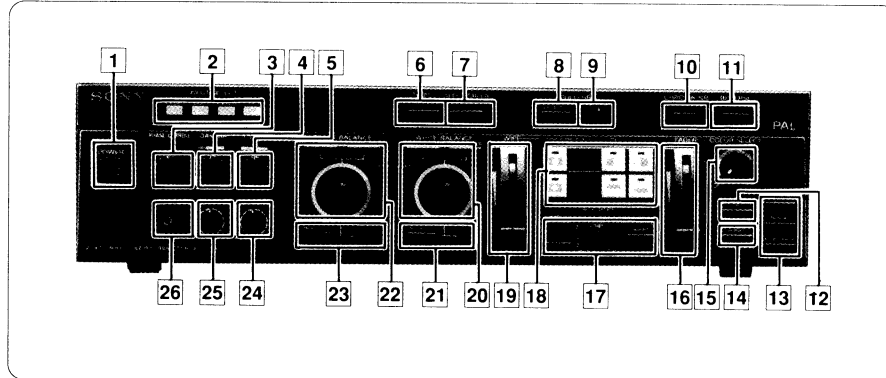
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SECTION 1 GENERAL

1-1. LOCATION AND FUNCTION OF CONTROLS

Front panel

Each button or switch (except POWER) is equipped with an indicator which lights up when turned on. To turn the indicator off, simply press it again.



1 POWER switch

2 INPUT SELECT buttons

Select the desired input source. Two video and audio channels 1 and 2, are available. On each channel, S-VIDEO selects the VCR connected to the S-VIDEO SOURCE IN, and VIDEO selects the VCR connected to the V SOURCE IN connector.

3 PHASE CORRECT control

Adjust the strength of the image outlines.

4 GAMMA control

Adjusts the luminous intensity and color signals to give the recorded object a suitable brightness.

5 COLOR control

Adjusts the color intensity.

6 BYPASS switch

Outputs unprocessed video signals.

7 SPLIT SCREEN switch

Divides the screen to display the processed video image on the left half and the unprocessed video image on the right.

8 VIDEO ART REVERSE switch

Selects where to start painting the image, from either high (off) or low (on) luminance portions of the image.

9 VIDEO ART control

Controls the painting of the video image with color selected by the COLOR SELECT knob. To use the video art function, set the WIPE lever all the way up and operate this control. This control should normally be set to the rightmost (maximum) position, otherwise the wipe will not function.

10 CHROMA NR (noise reduction) switch

Reduces color flickers in the image.

11 REVERSE (NEGA/POSI) switch

Inverts the output signal.

12 Fader VIDEO button

Enables video fade in/out using the FADER lever.

13 Video fader WHITE/BLACK/BACK COLOR buttons

Select either white, black or the back color designated by the COLOR SELECT knob as the fader color. (Default selection is white.)

14 Fader AUDIO button

Enables audio fade in/out using the FADER lever.

15 COLOR SELECT knob

Selects a color for wipe and video fader.

16 FADER lever

Controls the video and audio fade in/out. This lever should normally be kept at the lowermost position for both video and audio. Press the VIDEO button and move the lever up to fade out the screen in the fader color designated by the WHITE/BLACK/BACK COLOR buttons. Move it down to fade in. Press the AUDIO button and move the lever up to fade out the audio sound. Move it down to fade in.

17 AUTO WIPE/FADER buttons, SPEED control and START button

Allow automatic wipe and fade in/out. The speed can be adjusted using the SPEED control. Press the START button to begin.

18 WIPE PATTERN buttons

Select the wipe pattern.

19 WIPE lever

Wipes the screen with the color selected by the COLOR SELECT knob.

20 WHITE BALANCE ON/OFF and WIDE RANGE switches

Enable the white balance adjustment. Press the WIDE RANGE switch to widen the range of white balance control.

21 WHITE CLIP switch and control

Compensate color with bright segments of the image to make white objects look normal. Set the compensation level using the control. Turning it clockwise increases the level. The white clip function is disabled when the WHITE BALANCE switch is turned off.

22 BLACK BALANCE ON/OFF and WIDE RANGE switches

Enable black balance adjustment. Press the WIDE RANGE switch to widen the range of black balance control.

23 BLACK CLIP switch and control

Compensate color with dark segments of the image to make black objects look normal. Set the compensation level using the control. Turning it clockwise increases the level. The black clip function is disabled when the BLACK BALANCE switch is turned off.

24 AUDIO MIX control

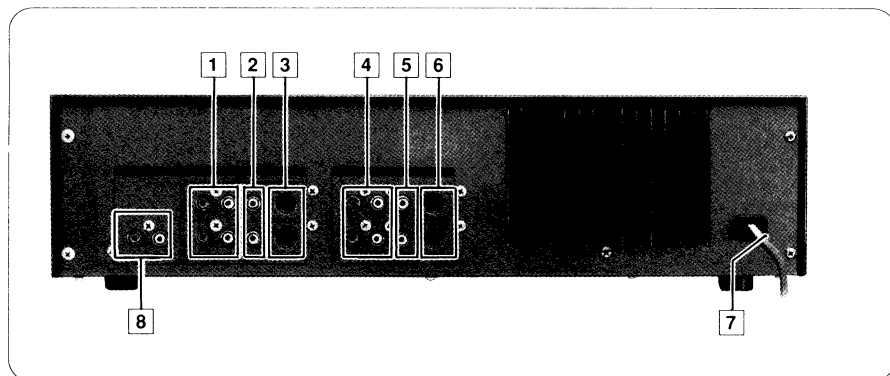
Controls the mixing level of audio signals input from SOURCE IN and LINE IN jacks.

25 MIC (microphone) LEVEL control

Controls the level of sound input from the MIC jack.

26 MIC jack (minijack)

Accepts a microphone.

**1 Audio R/L SOURCE IN 1/2 jacks (phono)**

Connect to the audio output jacks of a monitor, VCR, video camera recorder or other video equipment.

2 V(ideo) SOURCE IN 1/2 jacks (phono)

Connect to the video output jacks of a monitor, VCR, video camera recorder or other video equipment.

3 S-VIDEO SOURCE IN 1/2 connectors (4-pin mini DIN)

Connect to the S-video output connector of a monitor, VCR, video camera recorder or other video equipment.

4 Audio R/L OUTPUT jacks (phono)

Connect to the audio input jacks of a VCR, video camera recorder or other video equipment. The same signal is output to both upper and lower row jacks.

5 V(ideo) OUTPUT jacks (phono)

Connect to the video input jacks of a VCR, video camera recorder or other video equipment. The same signal is output to both upper and lower jacks.

6 S-VIDEO OUTPUT connectors (4-pin mini DIN)

Connect to the S-video input connector of a VCR, video camera recorder or other video equipment. The same signal is output to both upper and lower connectors.

7 Power cord (mains lead)

Connect to an AC (mains) outlet.

8 LINE IN jacks (phono)

Connect to the line output jacks of a stereo amplifier when mixing sound.

1-2. MONITOR ADJUSTMENT AND PREPARATION

Before beginning color correction using XV-C900, adjust your monitor so that colors appearing on the monitor screen will not be deceptive.

1 Turn on the color corrector.	6 Turn on the recording VCR. If desired, record the color bar at the beginning of a tape for monitor color adjustment during future playback.
2 Set the COLOR SELECT knob to COLOR BAR.	7 Turn on the playback VCR.
3 Turn the VIDEO ART control fully to MAX.	8 Press the appropriate INPUT SELECT button.
4 Press one of the WIPE PATTERN buttons and move the WIPE lever to its uppermost position.	9 Press the activated WIPE PATTERN button (with the lamp lit) to turn it off. The color bar disappears.
5 Turn on the TV/monitor and select the appropriate input so that the color bar appears on the screen.	
Adjusting brightness - Turn the monitor's color control to the minimum so that the color bar appears in black and white. - Turn the monitor's brightness control until the eight bars are clearly distinguished.	
Adjusting color intensity Adjust the monitor's color until all eight colors appear normal. (Refer to the color bar photograph [G] on the reference sheet.)	

Caution

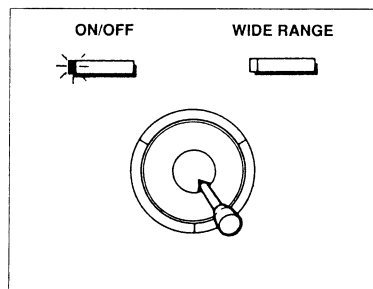
When recording the color bar or using it to adjust the color on the monitor, make sure that the power of the playback VCR is turned off. Signals being input from the SOURCE IN jacks may distort the color bar.

1-3. COLOR ADJUSTMENT AND CORRECTION DURING EDITING

Insert a prerecorded tape into the playback VCR, begin playback and adjust color using the functions listed below. Refer to the photographs provided on the attached color reference sheet.

White/Black Balance

To make "supposed-to-be white" objects look properly white [A]
Press the WHITE BALANCE ON/OFF switch and move the lever.



This allows color correction of the video image's bright portions.

To make "supposed-to-be black" objects look properly black [B]
Press the BLACK BALANCE ON/OFF switch and move the lever.

This allows color correction of the video image's dark portions.

You can even create special color effects with this function. [C]

A color screen can be changed gradually to monochrome or a monochrome screen gradually to color. Setting the COLOR control to the leftmost position (minimum) may provide better results.

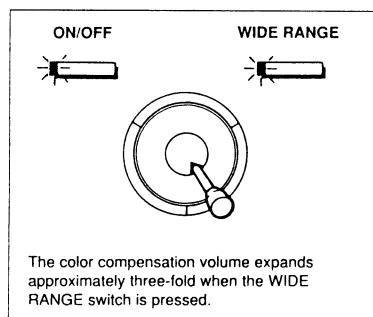
Note

The desired color may not be generated if a video source without burst signals is input (from a monochrome video camera, etc.)

Wide Range

For a greater range of corrections

Press the WIDE RANGE switch(es) and move the WHITE (BLACK) BALANCE lever(s).



Note

Certain TV sets have a muting function which may cause the screen to go blank when noise-ridden pictures, such as high-speed picture search images, are processed by this unit.

White/Black Clip

Compensating color with bright (dark) segments of the image

When the video image is adjusted referring to a color other than white or black, white and black objects may not appear natural. Even in that case, the WHITE (BLACK) CLIP function allows you to compensate color with the white (black) segments of an excessively bright (dark) screen.

Press the WHITE (BLACK) CLIP switch. Adjust the white (black) balance compensation level using the control. Turn the control fully to the right to maximize the compensation level. When it is set to the leftmost position (minimum), the level is the same as when the WHITE (BLACK) CLIP switch is turned off. Both the switch and control do not function when the WHITE (BLACK) BALANCE ON/OFF switch is turned off.

Note

In normal circumstances, use the unit with this switch turned off.

Color Control

Adjusting color intensity [D]

- Turn the control clockwise to obtain a deeper color.
- Turn the control counterclockwise to obtain a lighter color.
- In normal circumstances, set this control to the center click position.

Gamma Control

Correcting pictures that are either too bright or dark [E]

- To brighten a dark subject on a bright background, turn the GAMMA control towards HIGH.
- To make a bright subject on a dark background easier to see, turn the control towards LOW.
- In normal circumstances, set the control at the center click position.

Phase Correct

Correcting false outlines after repeated editing

- Turn the control towards [+] makes the overall contrast sharper.
- Turn the control towards [-] allows you to eliminate false outlines around the edges of the picture.
- In normal circumstances, set the control at the center click position.

Chroma NR (noise reduction)

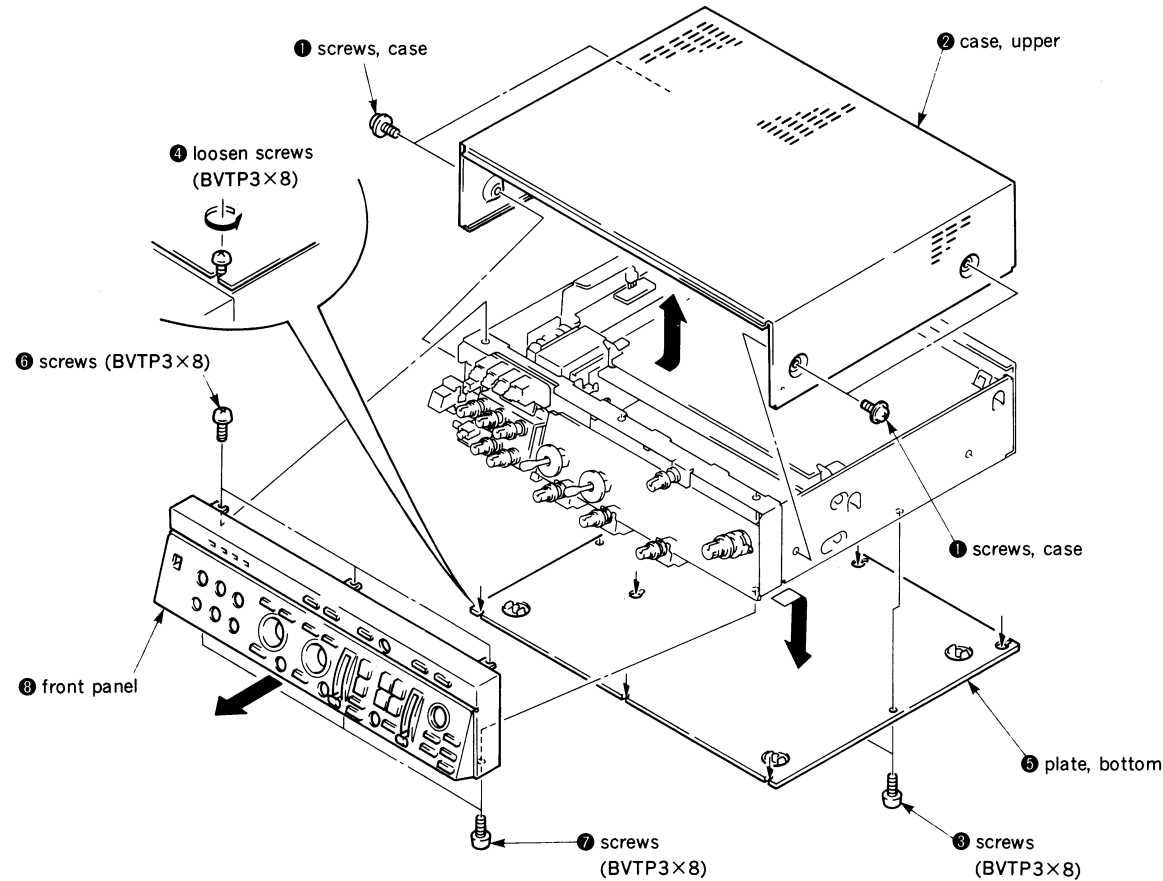
Reducing color flickers [F]

- Turn the CHROMA NR switch on to reduce color flickering caused by repeated editing.
- This function does not affect normal images.

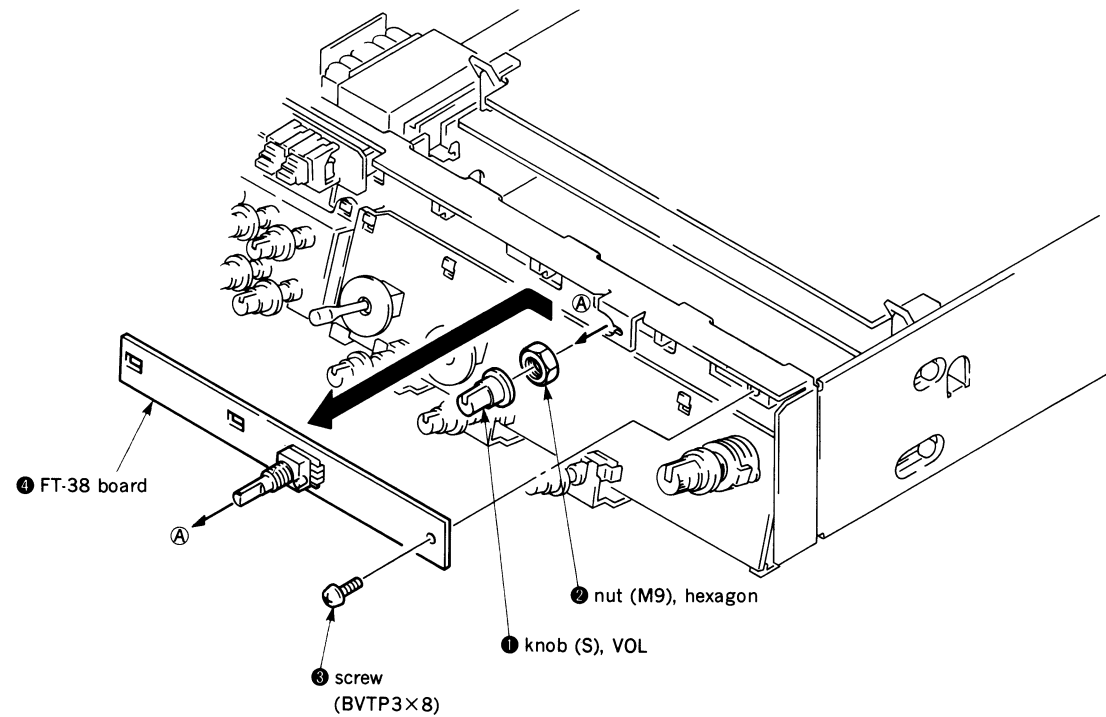
SECTION 2
DISASSEMBLY

Note: The number within "●" means the sequential number for dismounting.

2-1. REMOVAL OF CABINET, FRONT PANEL

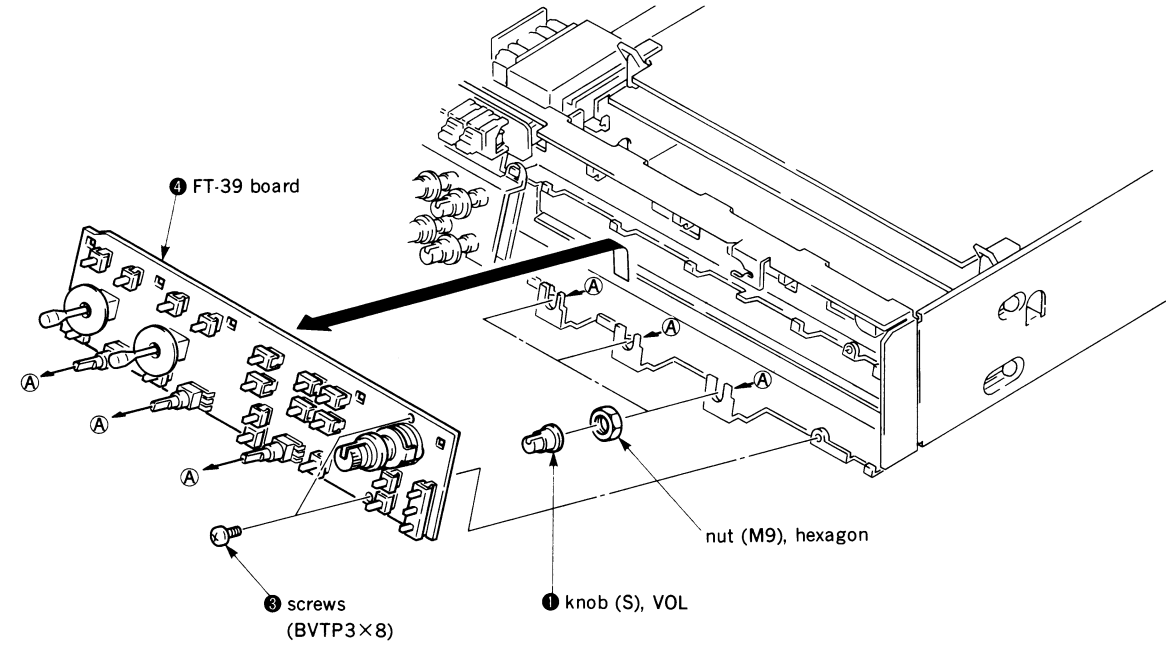


2-2. REMOVAL OF FT-38 BOARD

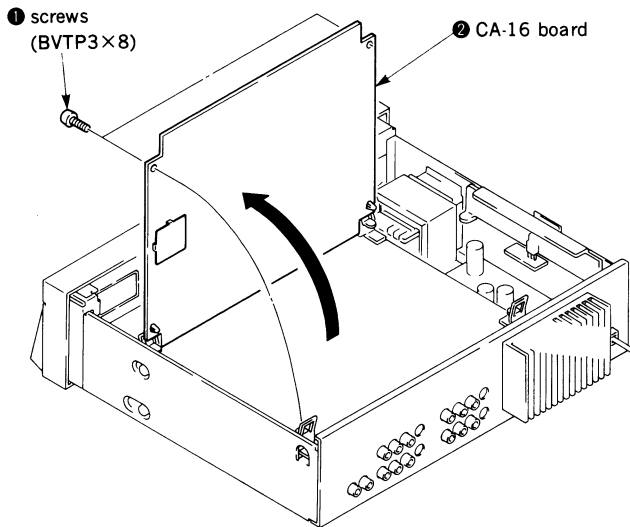


2-3. REMOVAL OF FT-39 BOARD

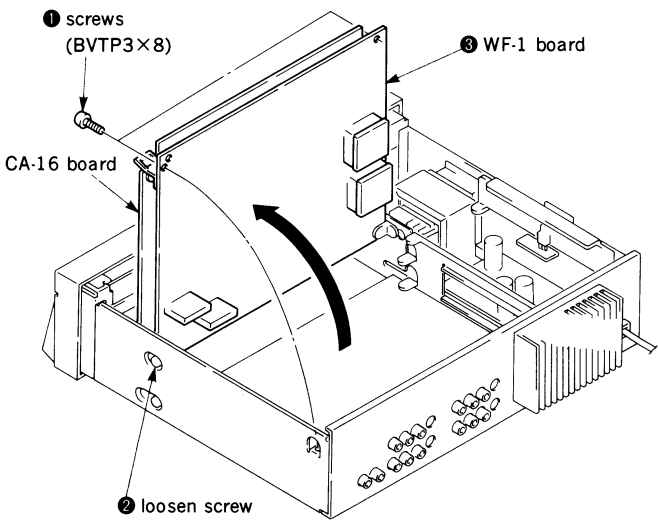
1) Refer to 2-2. and remove the FT-38 board.



2-4. OPENING OF CA-16 BOARD



2-5. OPENING OF WF-1 BOARD



3-1. CIRCUIT

AC-4
(POV)

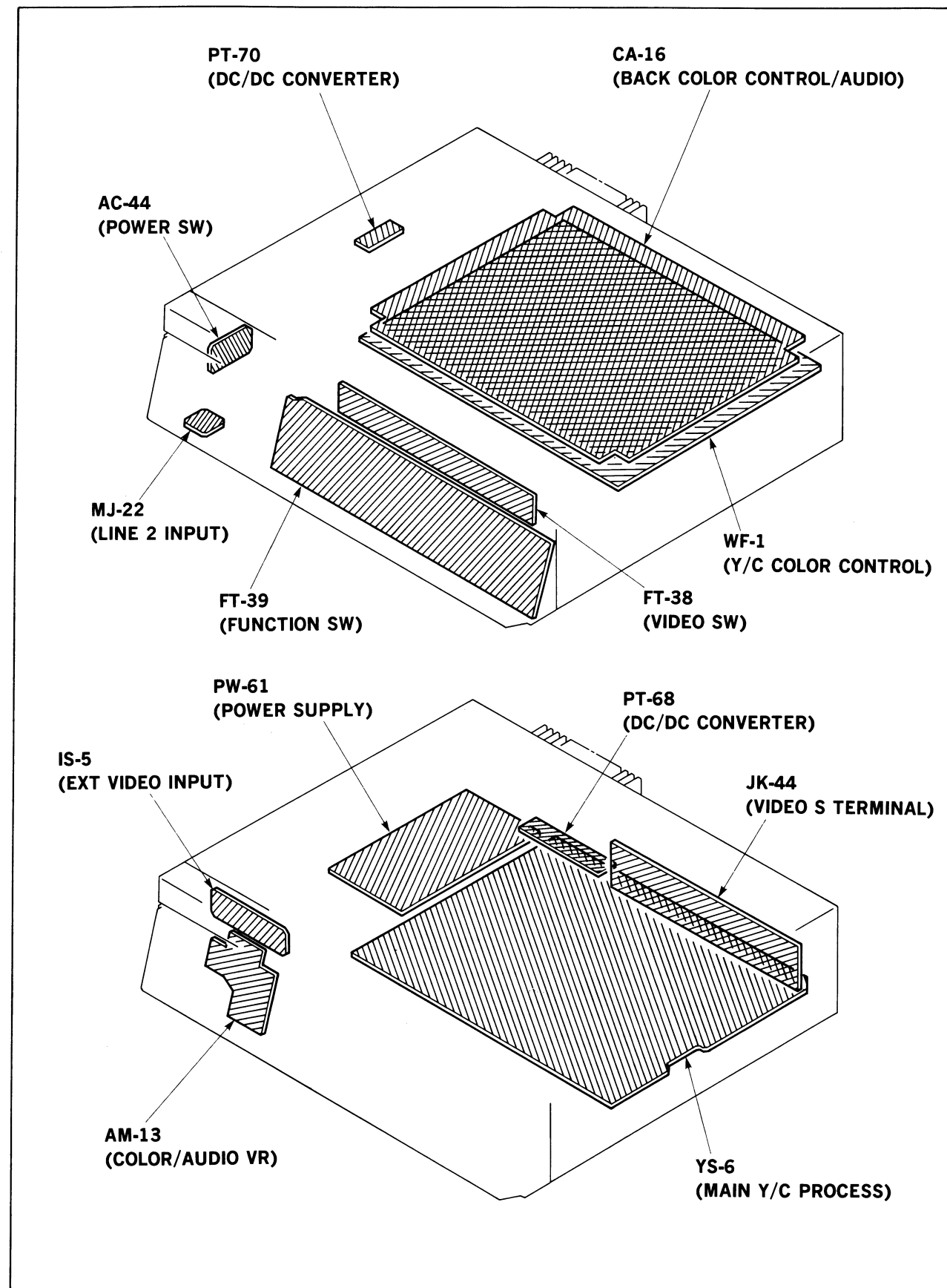
MJ-2
(LINE)

IS-5
(EXT VID)

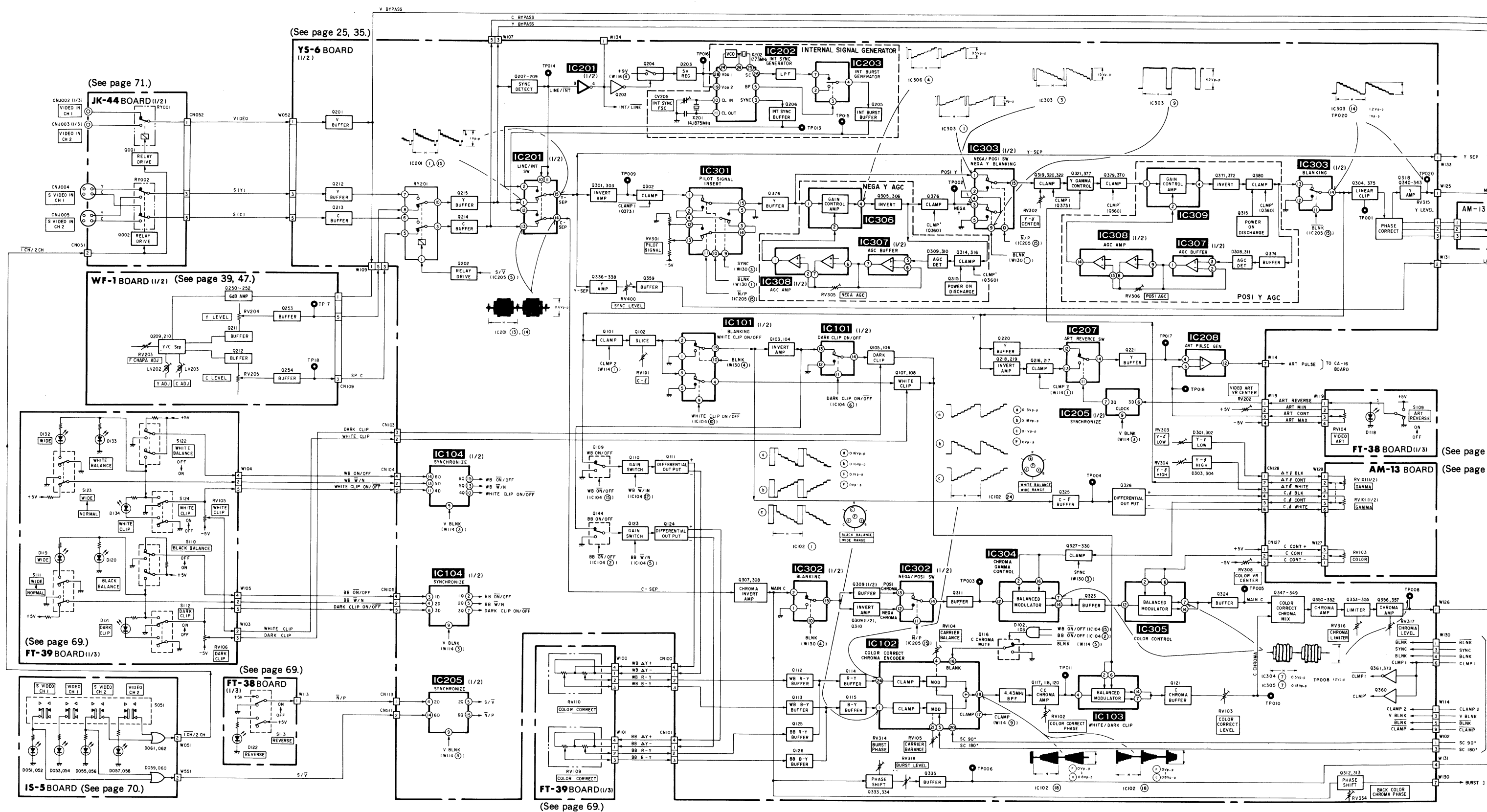
AM
(CO)

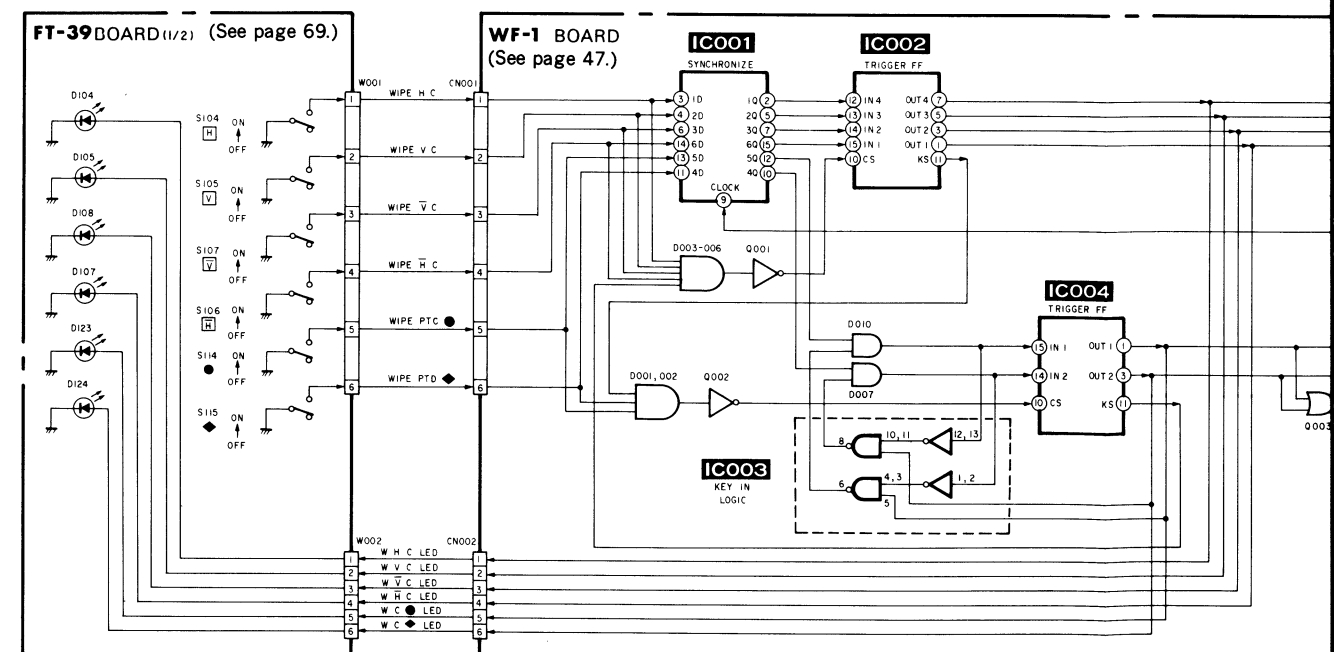
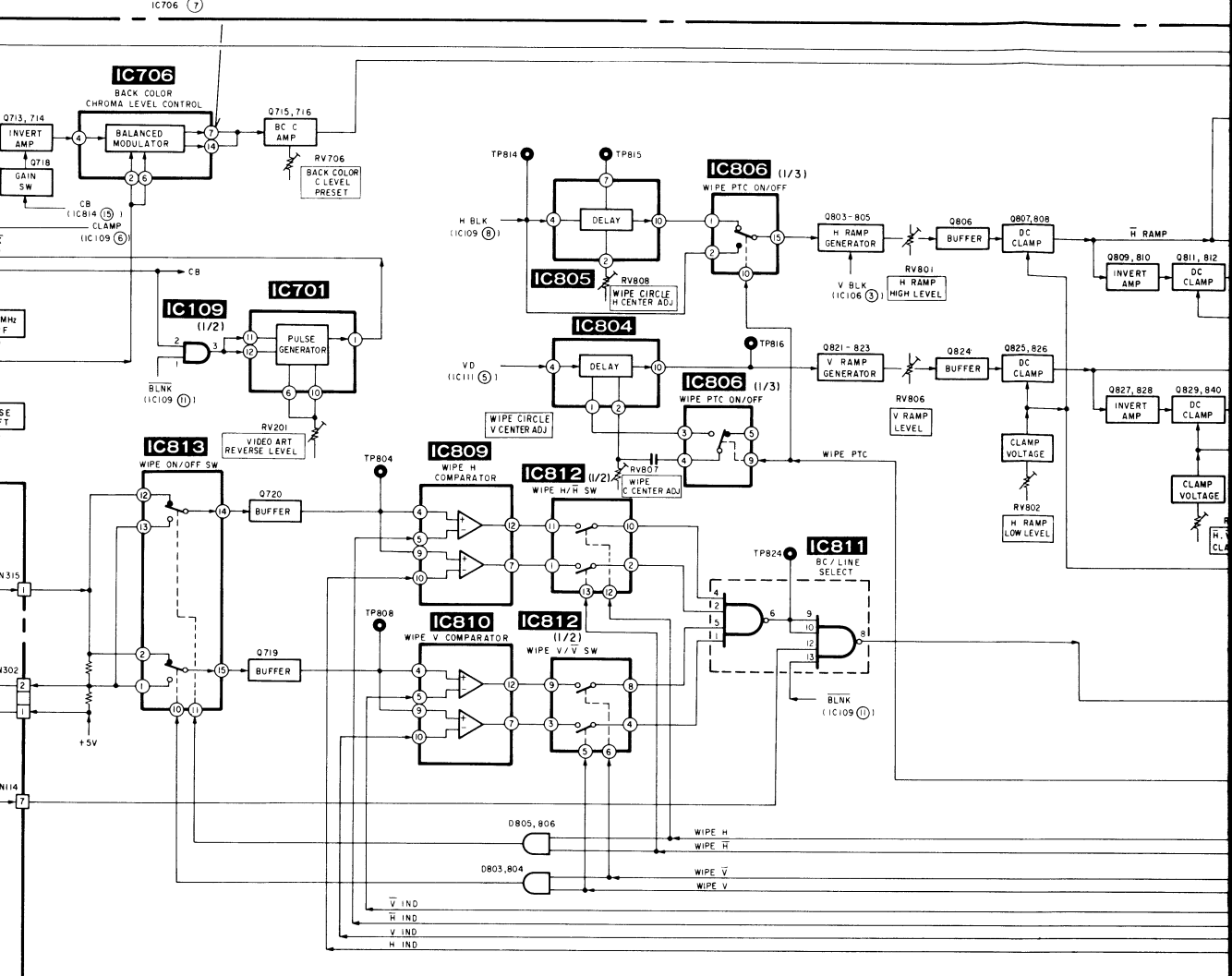
SECTION 3 DIAGRAMS

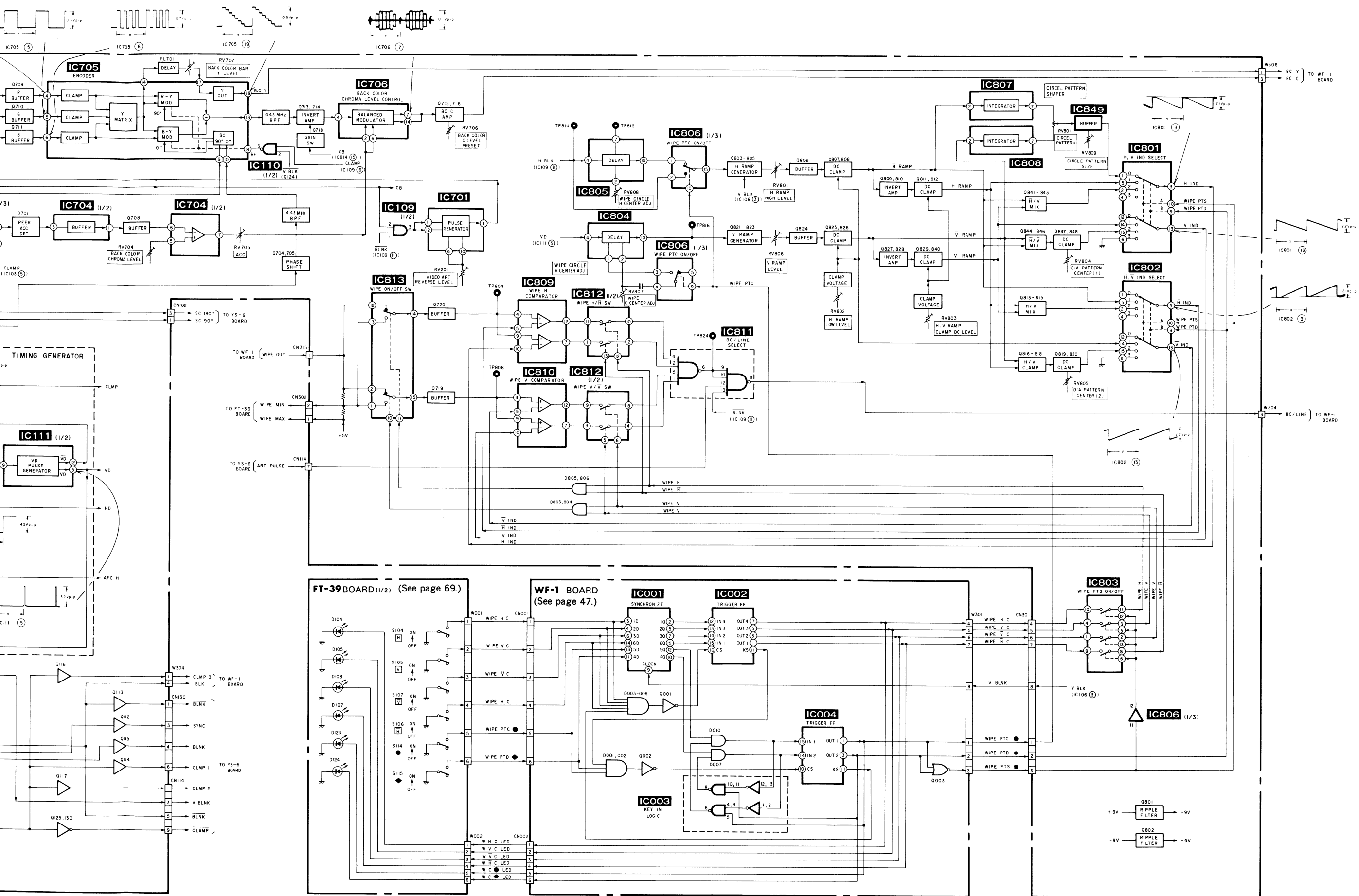
3-1. CIRCUIT BOARDS LOCATION



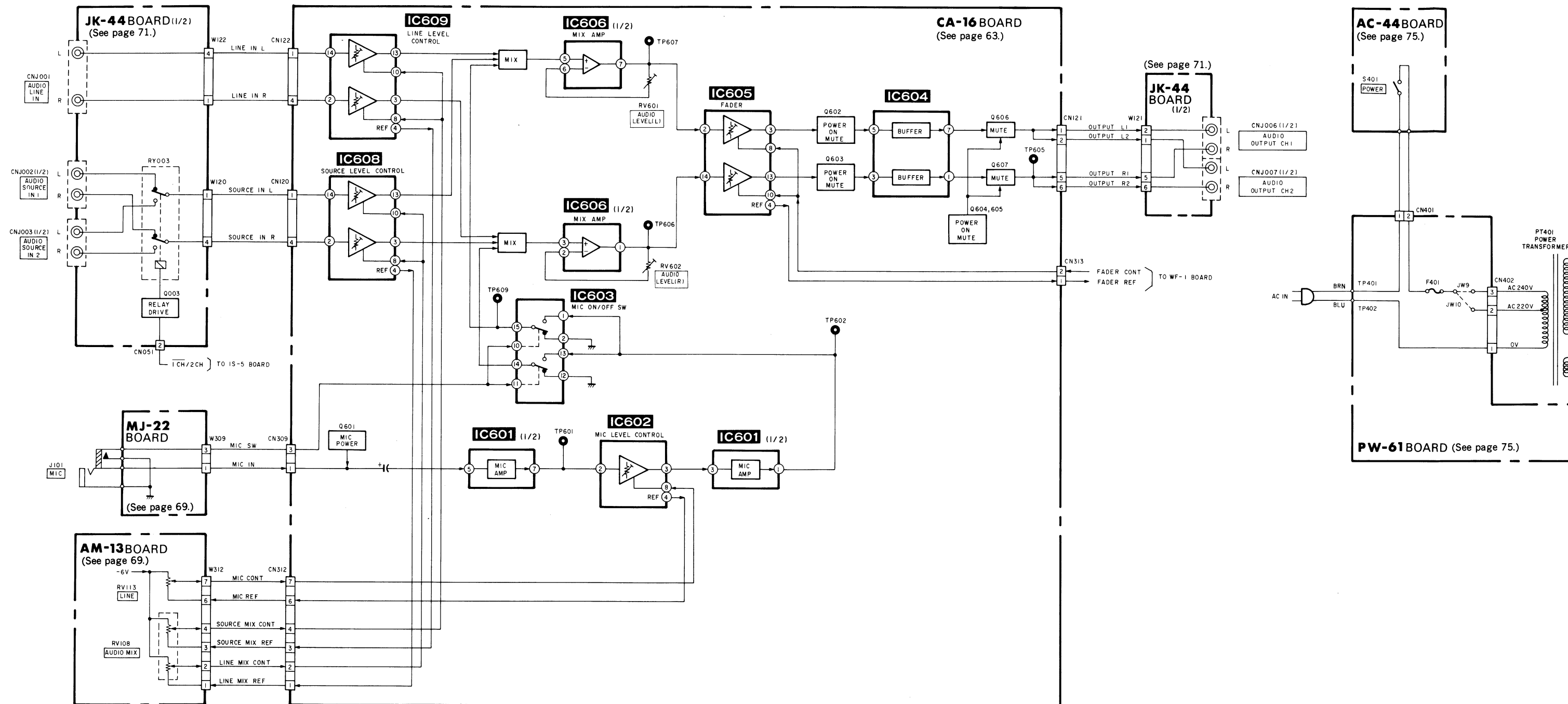
3-2. COLOR CORRECT BLOCK DIAGRAM





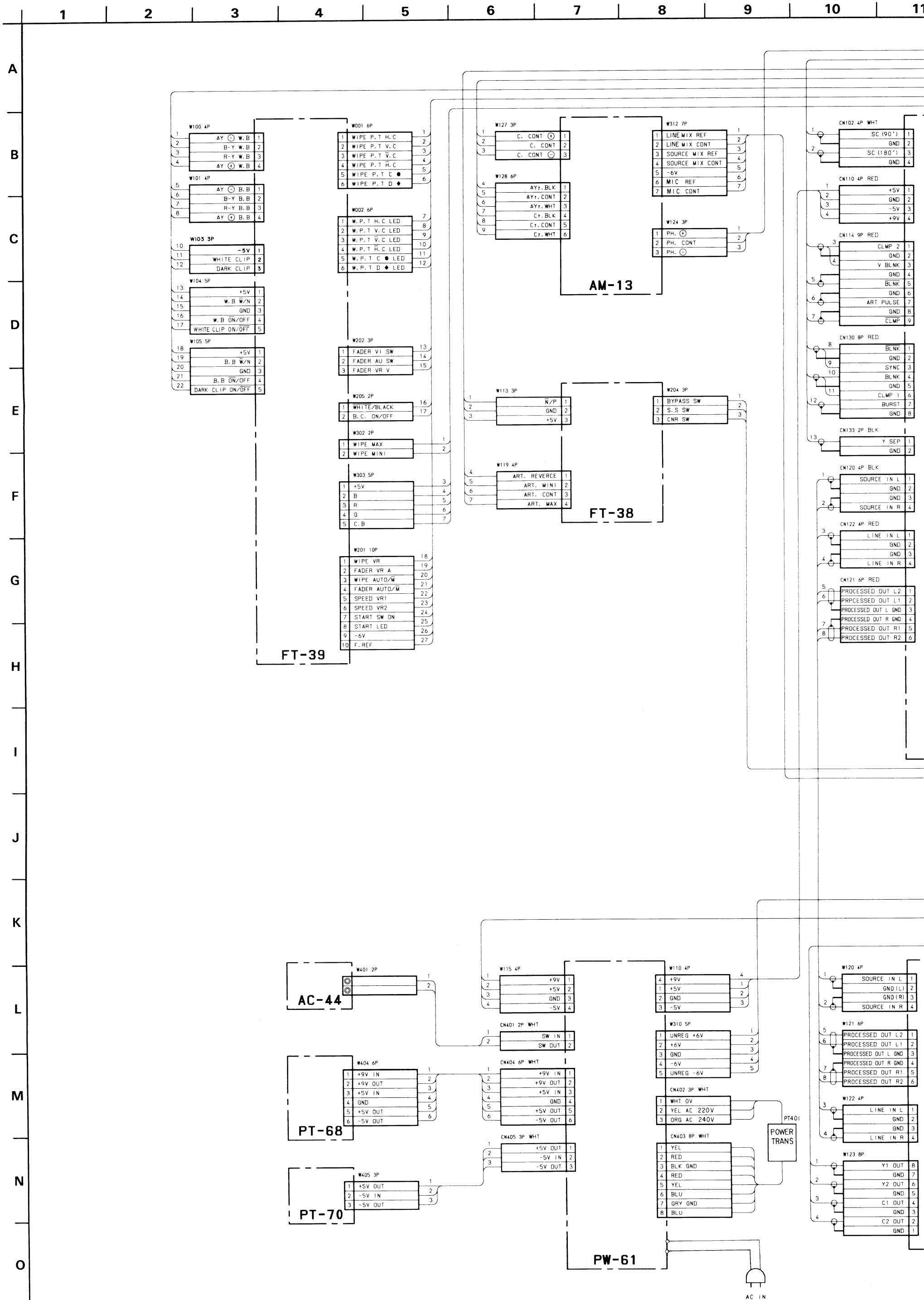


3-4. AUDIO/POWER BLOCK DIAGRAM



SECTION 4 PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

4-1. FRAME SCHEMATIC DIAGRAM



AM-13

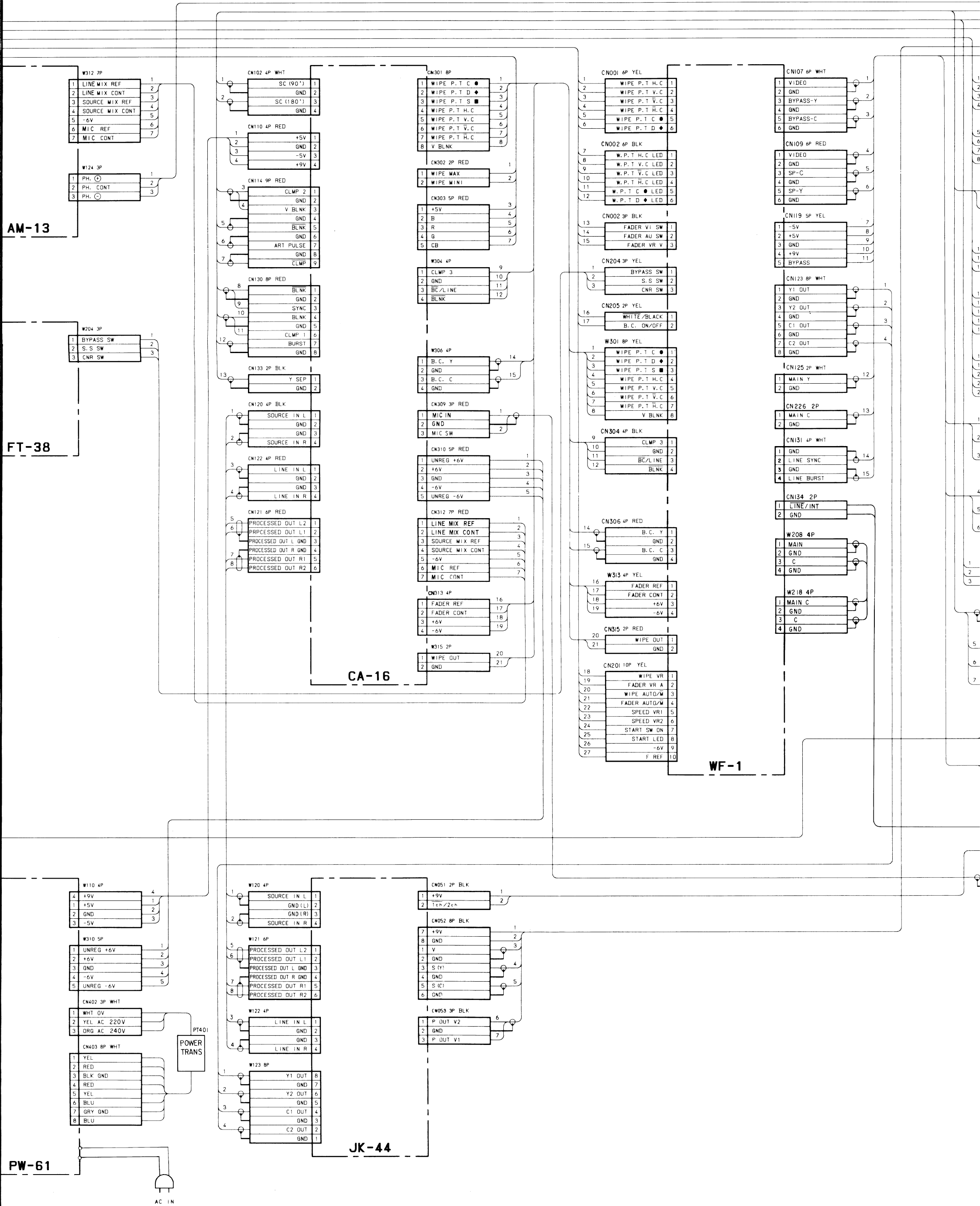
FT-38

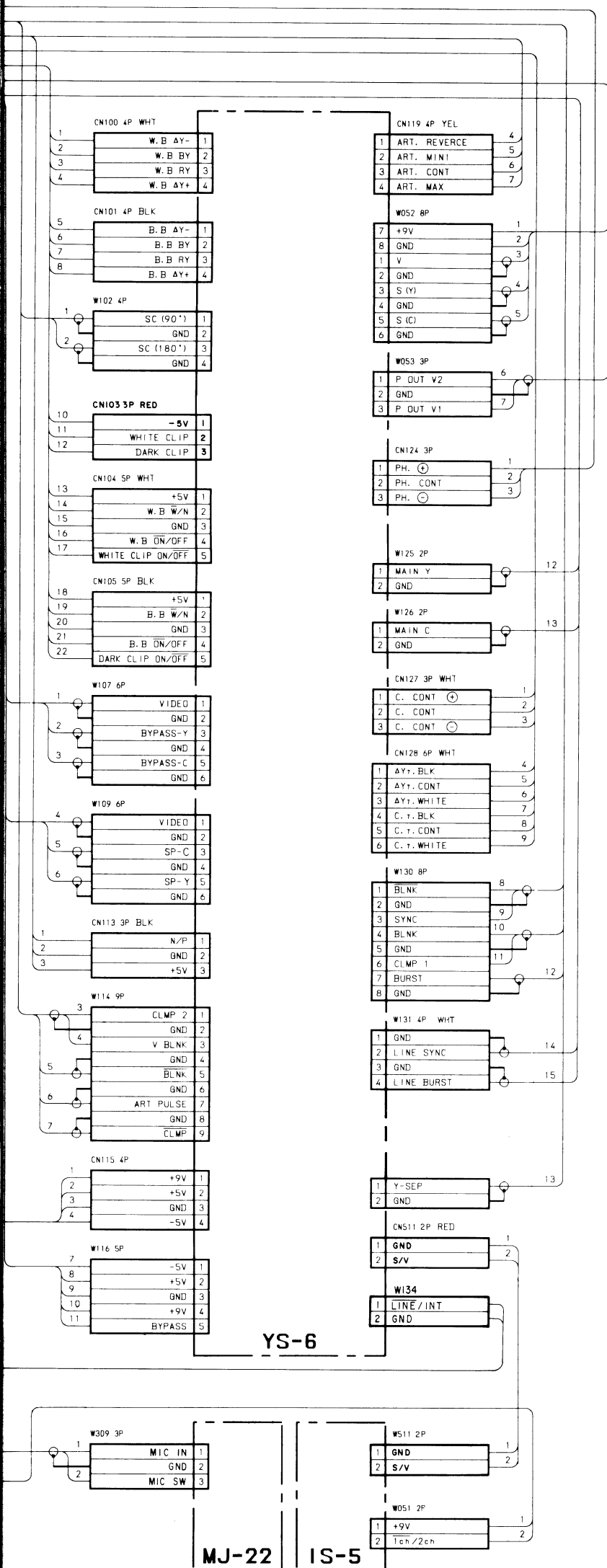
CA-16

WF-1

PW-61

JK-44





4-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.

(In addition to this, the necessary note is printed in each block.)

• For Printed Wiring Board:

Note:

- : Pattern from the side which enables seeing.
- Circled numbers refer to waveforms.

• For Schematic Diagram:

Note:

- All resistors are in ohms, 1/4W unless otherwise noted.
Chip resistor are 1/10W unless otherwise noted.
kΩ: 1000Ω, MΩ: 1000kΩ.
- All capacitors are in μF unless otherwise noted. pF : μμF.
50V or less are not indicated except for electrolytics and tantalums.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : nonflammable resistor.
- : panel designation.
- : adjustment for repair. *
- : B + Line *
- : B - Line. *
- : IN/OUT direction of B(+, -) line. *

Note: The components identified by mark or dotted line with mark are critical for safety.
Replace only with part number specified.

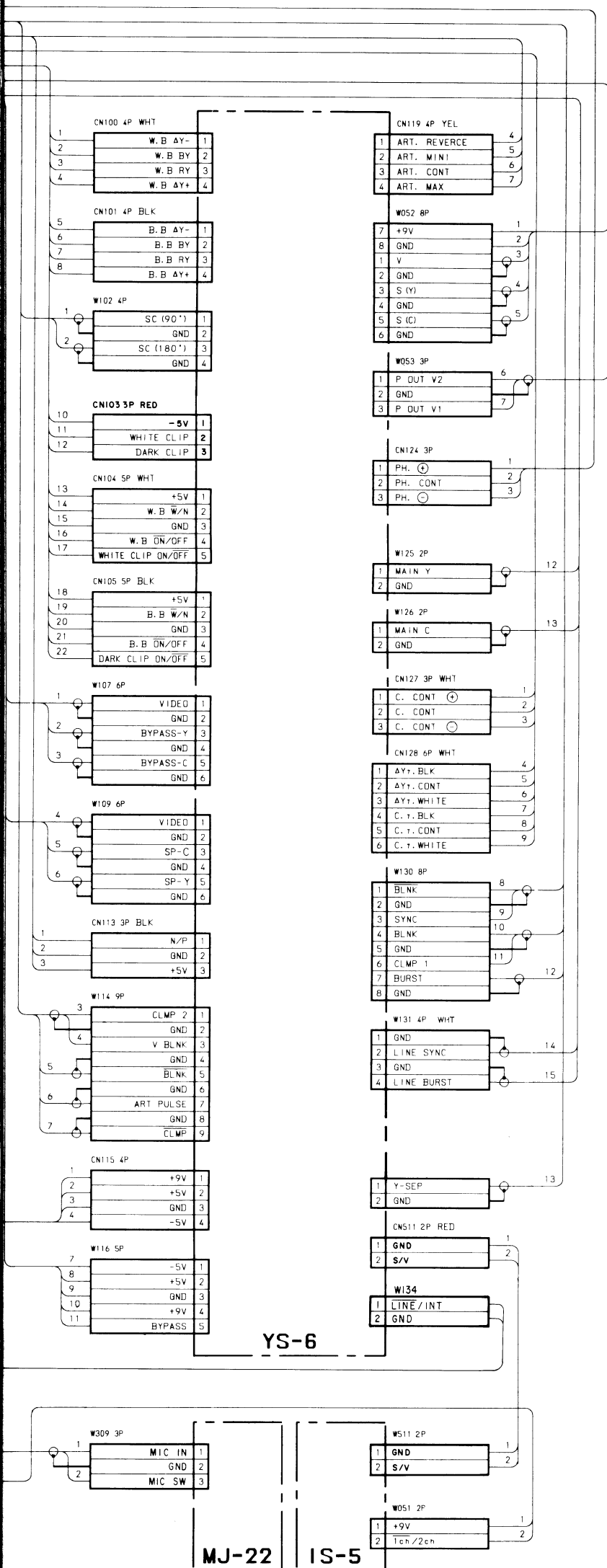
When indicating parts by reference number, please include the board name.

- For voltages and waveforms.
- Voltages are dc between ground and measurement points. *
- Readings are taken with a color-bar signal input. *
- Readings are taken with a digital multimeter (DC10MΩ). *
- Voltage variations may be noted due to normal production tolerances. *

VIDEO CH1 : ON
BYPASS : OFF
SPLIT SCREEN : OFF
CHROMA NR : OFF
REVERSE : POSI
COLOR CORRECT: OFF
WIPE : OFF
FADER VIDEO : ON
FADER AUDIO : OFF
COLOR SELECT : COLOR BAR
FADER VR : LOWER

Set the control knob to the mechanical center position unless otherwise noted.

* : indicated by the color red.



4-2. PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

THIS NOTE IS COMMON FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS.

(In addition to this, the necessary note is printed in each block.)

• For Printed Wiring Board:

Note:

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- Circled numbers refer to waveforms.

• For Schematic Diagram:

Note:

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Chip resistor are 1/10W unless otherwise noted.
kΩ: 1000Ω, MΩ: 1000kΩ.
- All capacitors are in μF unless otherwise noted. pF : μμF.
50V or less are not indicated except for electrolytics and tantalums.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- : nonflammable resistor.
- : panel designation.
- : adjustment for repair. *
- : B + Line *
- : B - Line. *
- : IN/OUT direction of B(+, -) line. *

Note: The components identified by mark or dotted line with mark are critical for safety.
Replace only with part number specified.

When indicating parts by reference number, please include the board name.

- For voltages and waveforms.
- Voltages are dc between ground and measurement points. *
- Readings are taken with a color-bar signal input. *
- Readings are taken with a digital multimeter (DC10MΩ). *
- Voltage variations may be noted due to normal production tolerances. *

VIDEO CH1 : ON
BYPASS : OFF
SPLIT SCREEN : OFF
CHROMA NR : OFF
REVERSE : POSI
COLOR CORRECT: OFF
WIPE : OFF
FADER VIDEO : ON
FADER AUDIO : OFF
COLOR SELECT : COLOR BAR
FADER VR : LOWER

Set the control knob to the mechanical center position unless otherwise noted.

* : indicated by the color red.

—Ref. No. YS-6 BOARD: 1000 series—

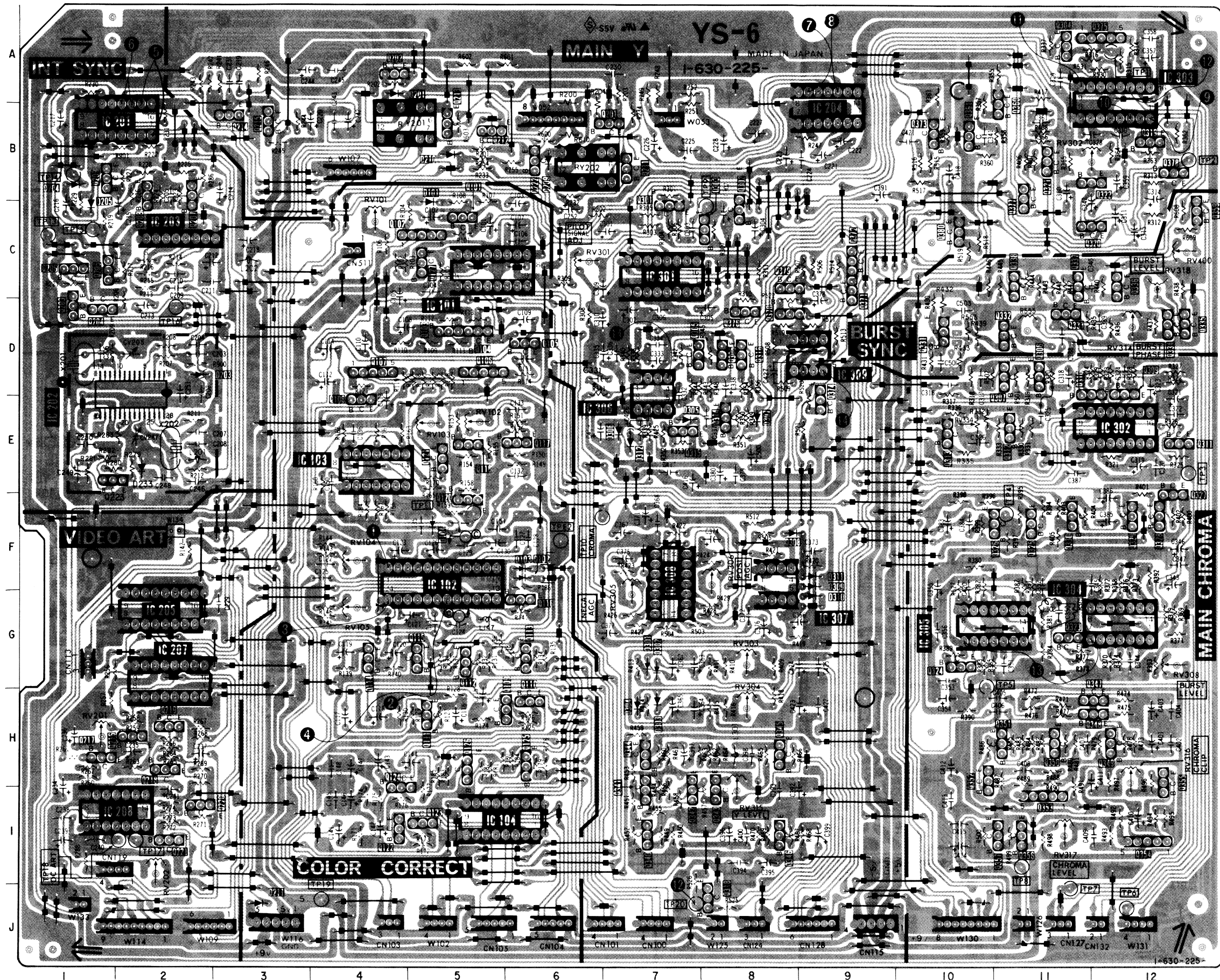




YS-6 (MAIN Y/C PROCESS) PRINTED WIRING BOARD

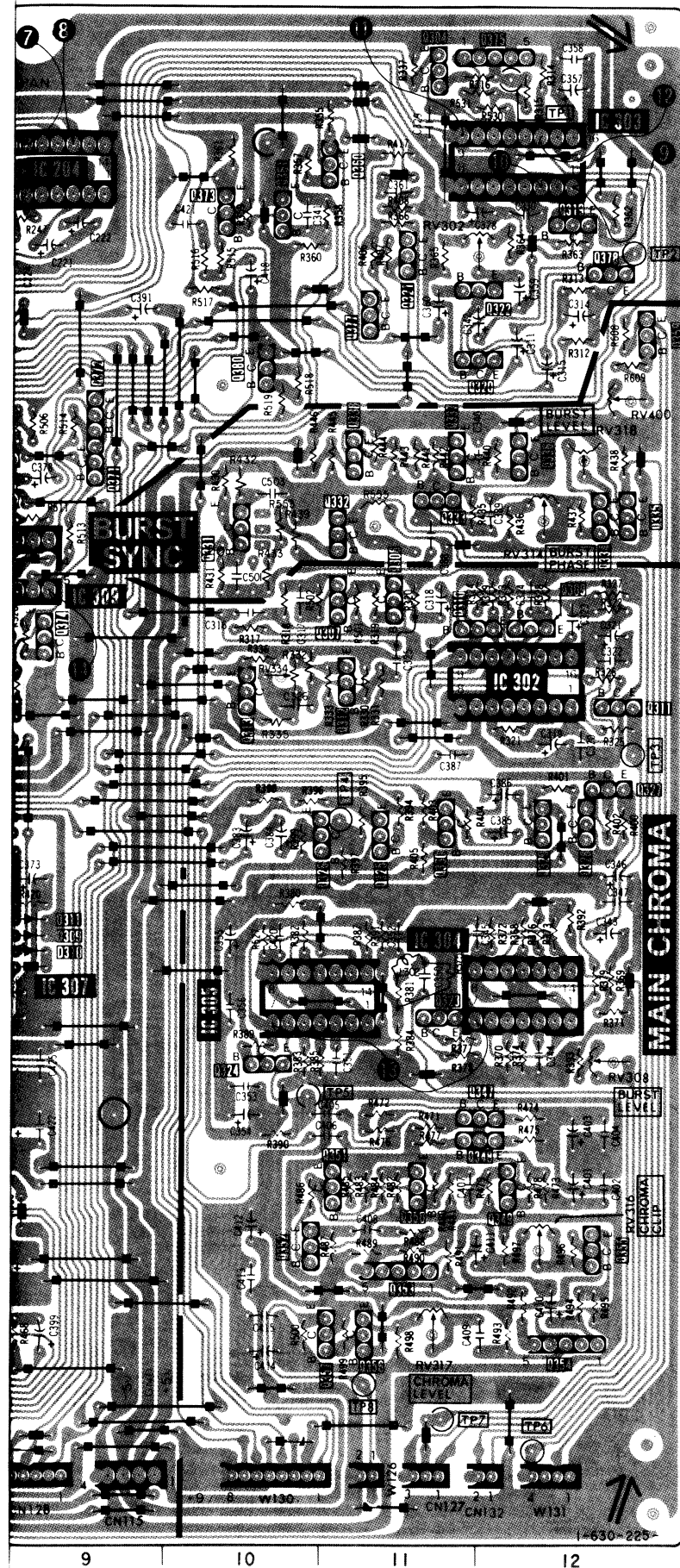
—Ref. No. YS-6 BOARD: 1000 series—

YS-6 BOARD



YS-6 BOARD

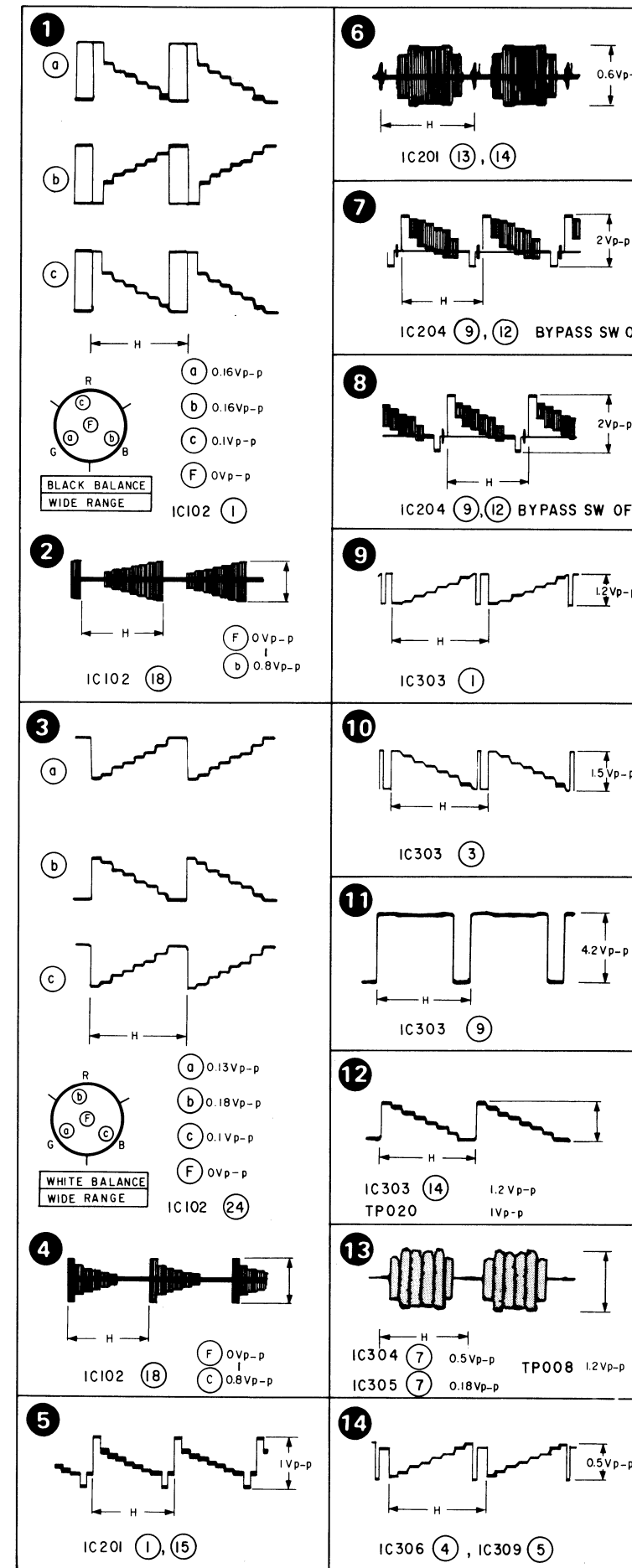
D101	C-5	Q222	C-6
D102	G-6	Q233	E-1
D103	G-6	Q301	C-7
D104	F-5	Q302	C-8
D201	B-4	Q303	C-8
D203	D-2	Q304	A-11
D204	B-1	Q305	D-8
D205	C-1	Q306	D-8
D209	B-6	Q307	E-11
D210	B-5	Q308	E-11
D211	J-3	Q309	E-12
D233	E-2	Q310	E-12
D301	H-7	Q311	F-12
D302	H-7	Q312	F-11
D303	H-7	Q313	F-10
D304	H-7	Q314	E-8
D305	E-7	Q315	E-8
D307	E-8	Q316	D-8
D309	G-9	Q318	J-8
D310	G-9	Q319	B-12
D311	G-9	Q320	C-12
D312	F-7	Q321	C-11
		Q322	C-12
		Q323	H-11
IC101	D-5	Q324	H-10
IC102	G-5	Q325	F-11
IC103	F-4	Q326	F-11
IC104	I-5	Q327	F-12
IC201	B-1	Q328	F-12
IC202	E-2	Q329	F-12
IC203	C-2	Q330	F-12
IC204	B-9	Q331	E-10
IC205	G-2	Q332	E-11
IC207	H-2	Q333	E-11
IC208	I-1	Q334	E-12
IC301	D-7	Q335	E-12
IC302	E-12	Q336	D-12
IC303	B-11	Q337	D-11
IC304	H-12	Q338	D-11
IC305	H-11	Q340	I-7
IC306	E-7	Q341	I-7
IC307	G-8	Q342	I-7
IC308	G-8	Q343	I-8
IC309	E-9	Q344	H-7
		Q345	H-8
Q101	C-5	Q346	I-8
Q102	C-5	Q347	H-11
Q103	D-5	Q348	H-11
Q104	D-5	Q349	I-12
Q105	D-6	Q350	I-11
Q106	E-5	Q351	I-11
Q107	E-4	Q352	I-11
Q108	E-4	Q353	I-11
Q109	H-6	Q354	J-12
Q110	H-6	Q355	I-12
Q111	H-5	Q356	J-11
Q112	H-5	Q357	J-11
Q113	H-6	Q359	C-12
Q114	H-4	Q360	B-10
Q115	H-5	Q361	B-10
Q116	G-6	Q370	D-8
Q117	F-5	Q371	D-9
Q118	F-5	Q372	D-9
Q120	F-5	Q373	B-10
Q121	F-5	Q374	E-9
Q122	I-4	Q375	A-11
Q123	I-5	Q376	D-8
Q124	I-4	Q377	C-11
Q125	I-6	Q378	C-12
Q126	I-5	Q379	D-8
Q127	D-5	Q380	C-10
Q201	B-7		
Q202	B-4		
Q203	D-1		
Q204	D-1		
Q205	C-1		
Q206	C-1		
Q207	C-3		
Q208	C-2		
Q209	B-2		
Q211	B-7		
Q212	B-5		
Q213	B-5		
Q214	B-3		
Q215	B-3		
Q216	H-2		
Q217	H-2		
Q218	H-2		
Q219	H-2		
Q220	I-2		
Q221	I-2		



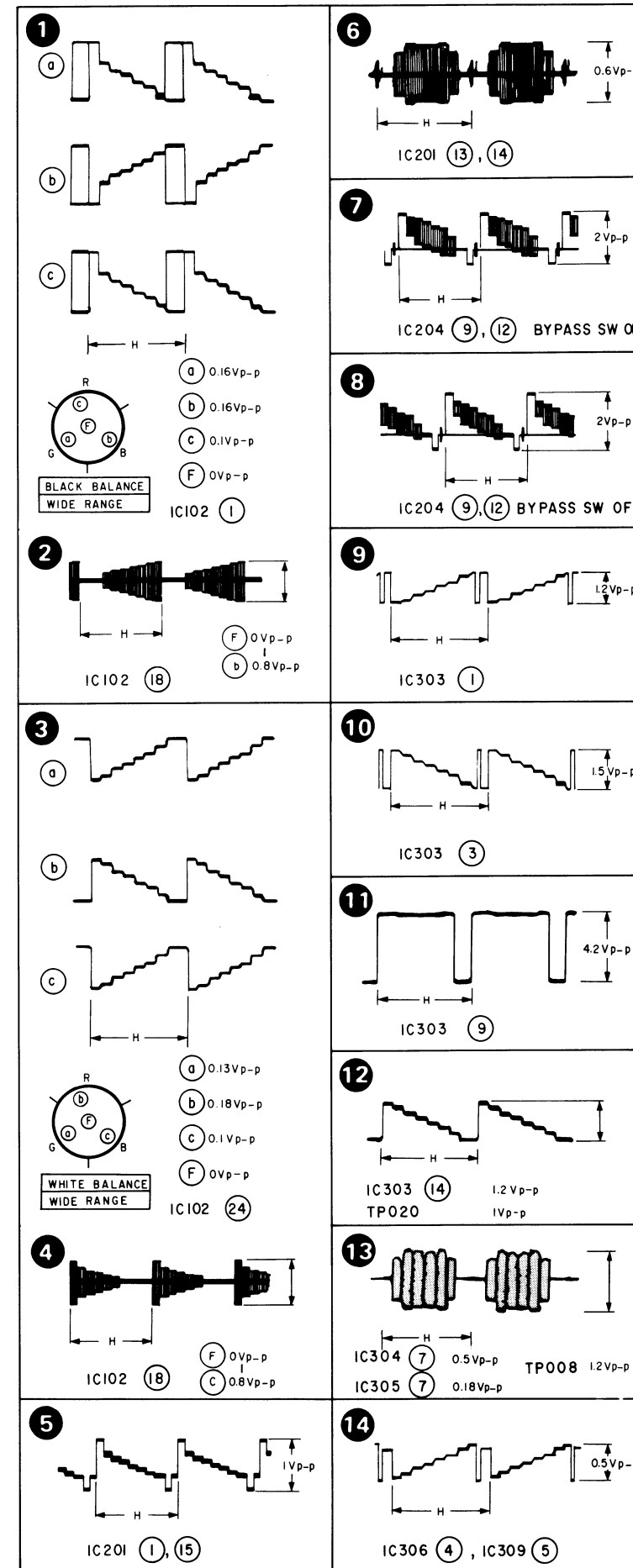
YS-6 BOARD

D101	C-5	Q222	C-6
D102	G-6	Q233	E-1
D103	G-6	Q301	C-7
D104	F-5	Q302	C-8
D201	B-4	Q303	C-8
D203	D-2	Q304	A-11
D204	B-1	Q305	D-8
D205	C-1	Q306	D-8
D209	B-6	Q307	E-11
D210	B-5	Q308	E-11
D211	J-3	Q309	E-12
D233	E-2	Q310	E-12
D301	H-7	Q311	F-12
D302	H-7	Q312	F-11
D303	H-7	Q313	F-10
D304	H-7	Q314	E-8
D305	E-7	Q315	E-8
D307	E-8	Q316	D-8
D309	G-9	Q318	J-8
D310	G-9	Q319	B-12
D311	G-9	Q320	C-12
D312	F-7	Q321	C-11
		Q322	C-12
		Q323	H-11
		Q324	H-10
		Q325	F-11
		Q326	F-11
		Q327	F-12
		Q328	F-12
		Q329	F-12
		Q330	F-12
		Q331	E-10
		Q332	E-11
		Q333	E-11
		Q334	E-12
		Q335	E-12
		Q336	D-12
		Q337	D-11
		Q338	D-11
		Q340	I-7
		Q341	I-7
		Q342	I-7
		Q343	I-8
		Q344	H-7
		Q345	H-8
		Q346	I-8
		Q347	H-11
		Q348	H-11
		Q349	I-12
		Q350	I-11
		Q351	I-11
		Q352	I-11
		Q353	I-11
		Q354	J-12
		Q355	I-12
		Q356	J-11
		Q357	J-11
		Q359	C-12
		Q360	B-10
		Q361	B-10
		Q370	D-8
		Q371	D-9
		Q372	D-9
		Q373	B-10
		Q374	E-9
		Q375	A-11
		Q376	D-8
		Q377	C-11
		Q378	C-12
		Q379	D-8
		Q380	C-10
IC101	D-5		
IC102	G-5		
IC103	F-4		
IC104	I-5		
IC201	B-1		
IC202	E-2		
IC203	C-2		
IC204	B-9		
IC205	G-2		
IC207	H-2		
IC208	I-1		
IC301	D-7		
IC302	E-12		
IC303	B-11		
IC304	H-12		
IC305	H-11		
IC306	E-7		
IC307	G-8		
IC308	G-8		
IC309	E-9		
Q101	C-5		
Q102	C-5		
Q103	D-5		
Q104	D-5		
Q105	D-6		
Q106	E-5		
Q107	E-4		
Q108	E-4		
Q109	H-6		
Q110	H-6		
Q111	H-5		
Q112	H-5		
Q113	H-6		
Q114	H-4		
Q115	H-5		
Q116	G-6		
Q117	F-5		
Q118	F-5		
Q120	F-5		
Q121	F-5		
Q122	I-4		
Q123	I-5		
Q124	I-4		
Q125	I-6		
Q126	I-5		
Q127	D-5		
Q201	B-7		
Q202	B-4		
Q203	D-1		
Q204	D-1		
Q205	C-1		
Q206	C-1		
Q207	C-3		
Q208	C-2		
Q209	B-2		
Q211	B-7		
Q212	B-5		
Q213	B-5		
Q214	B-3		
Q215	B-3		
Q216	H-2		
Q217	H-2		
Q218	H-2		
Q219	H-2		
Q220	I-2		
Q221	I-2		

YS-6 BOARD



YS-6 BOARD



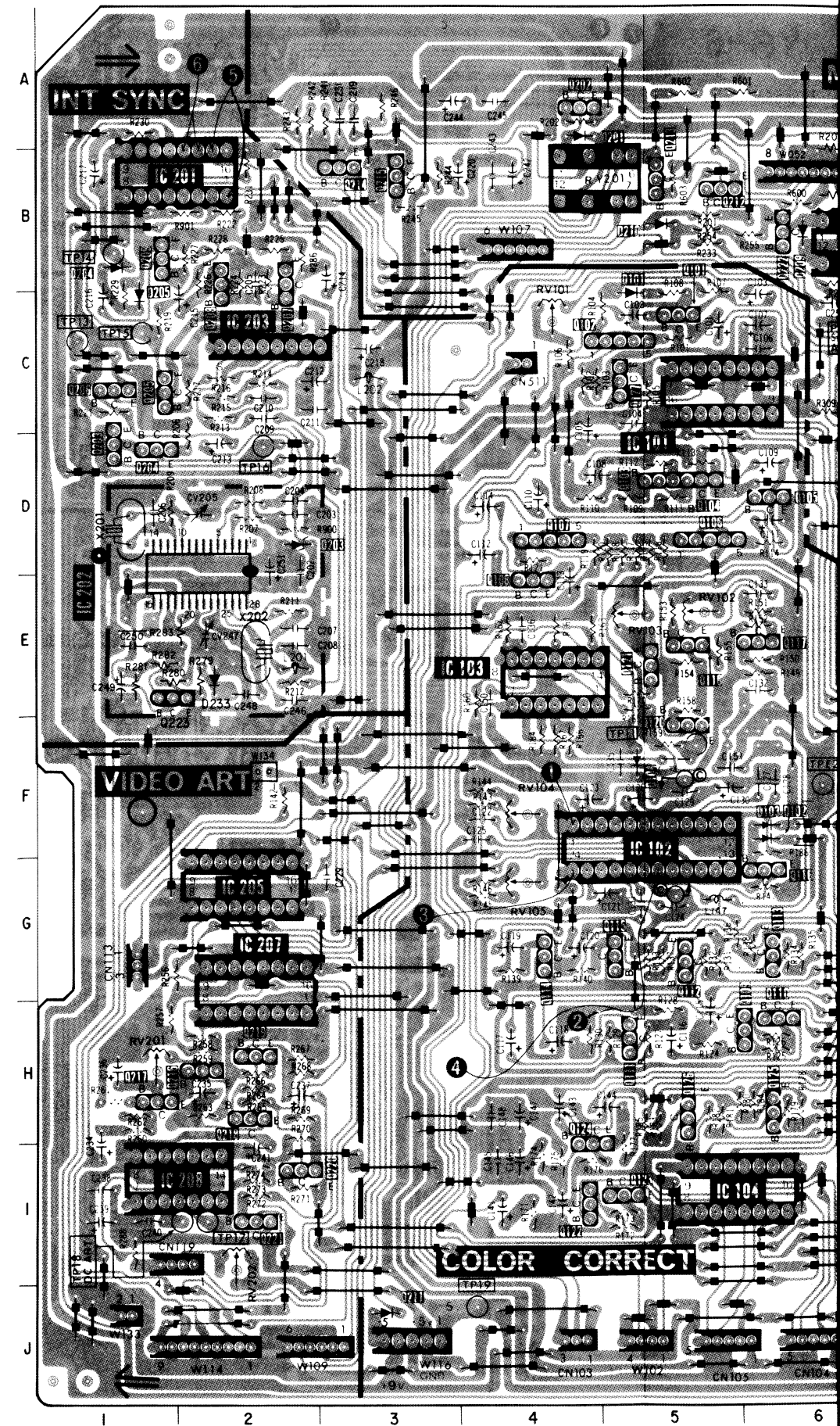
YS-6 BOARD

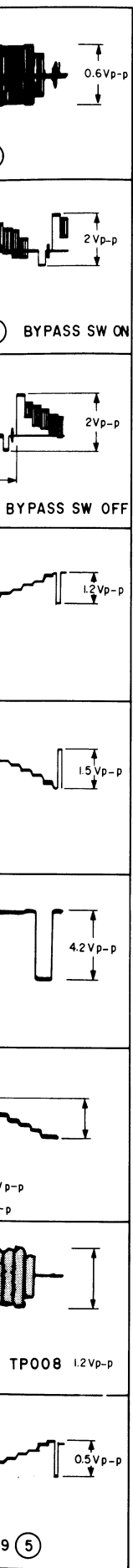
D101	C-5	Q222	C-6
D102	G-6	Q233	E-1
D103	G-6	Q301	C-7
D104	F-5	Q302	C-8
D201	B-4	Q303	C-8
D203	D-2	Q304	A-11
D204	B-1	Q305	D-8
D205	C-1	Q306	D-8
D209	B-6	Q307	E-11
D210	B-5	Q308	E-11
D211	J-3	Q309	E-12
D233	E-2	Q310	E-12
D301	H-7	Q311	F-12
D302	H-7	Q312	F-11
D303	H-7	Q313	F-10
D304	H-7	Q314	E-8
D305	E-7	Q315	E-8
D307	E-8	Q316	D-8
D309	G-9	Q318	J-8
D310	G-9	Q319	B-12
D311	G-9	Q320	C-12
D312	F-7	Q321	C-11
IC101	D-5	Q322	C-12
IC102	G-5	Q323	H-11
IC103	F-4	Q324	H-10
IC104	I-5	Q325	F-11
IC201	B-1	Q326	F-11
IC202	E-2	Q327	F-12
IC203	C-2	Q328	F-12
IC204	B-9	Q329	F-12
IC205	G-2	Q330	F-12
IC207	H-2	Q331	E-10
IC208	I-1	Q332	E-11
IC301	D-7	Q333	E-11
IC302	E-12	Q334	E-12
IC303	B-11	Q335	E-12
IC304	H-12	Q336	D-12
IC305	H-11	Q337	D-11
IC306	E-7	Q338	D-11
IC307	G-8	Q340	I-7
IC308	G-8	Q341	I-7
IC309	E-9	Q342	I-7
Q101	C-5	Q343	I-8
Q102	C-5	Q344	H-7
Q103	D-5	Q345	H-8
Q104	D-5	Q346	I-8
Q105	D-6	Q347	H-11
Q106	E-5	Q348	H-11
Q107	E-4	Q349	I-12
Q108	E-4	Q350	I-11
Q109	H-6	Q351	I-11
Q110	H-6	Q352	I-11
Q111	H-5	Q353	I-11
Q112	H-5	Q354	J-12
Q113	H-6	Q355	I-12
Q114	H-4	Q356	J-11
Q115	H-5	Q357	J-11
Q116	G-6	Q359	C-12
Q117	F-5	Q360	B-10
Q118	F-5	Q361	B-10
Q120	F-5	Q370	D-8
Q121	F-5	Q371	D-9
Q122	I-4	Q372	D-9
Q123	I-5	Q373	B-10
Q124	I-4	Q374	E-9
Q125	I-6	Q375	A-11
Q126	I-5	Q376	D-8
Q127	D-5	Q377	C-11
Q201	B-7	Q378	C-12
Q202	B-4	Q379	D-8
Q203	D-1	Q380	C-10
Q204	D-1		
Q205	C-1		
Q206	C-1		
Q207	C-3		
Q208	C-2		
Q209	B-2		
Q211	B-7		
Q212	B-5		
Q213	B-5		
Q214	B-3		
Q215	B-3		
Q216	H-2		
Q217	H-2		
Q218	H-2		
Q219	H-2		
Q220	I-2		
Q221	I-2		

YS-6 (MAIN Y/C PROCESS) PRINTED WIRING BOARD

—Ref. No. YS-6 BOARD: 1000 series—

YS-6 BOARD

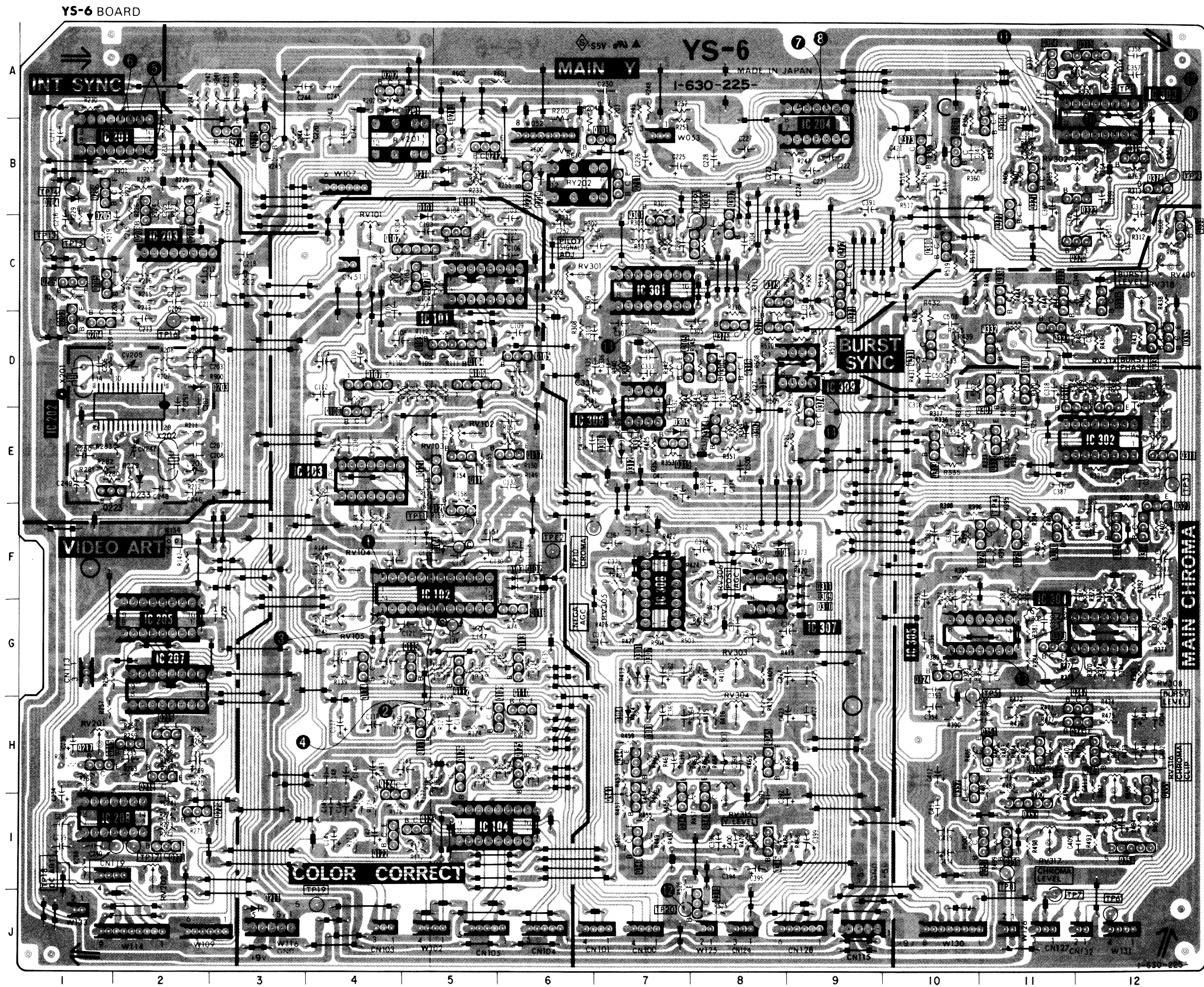




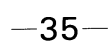
YS-6 (MAIN Y/C PROCESS) PRINTED WIRING BOARD —Ref. No. YS-6 BOARD: 1000 series—

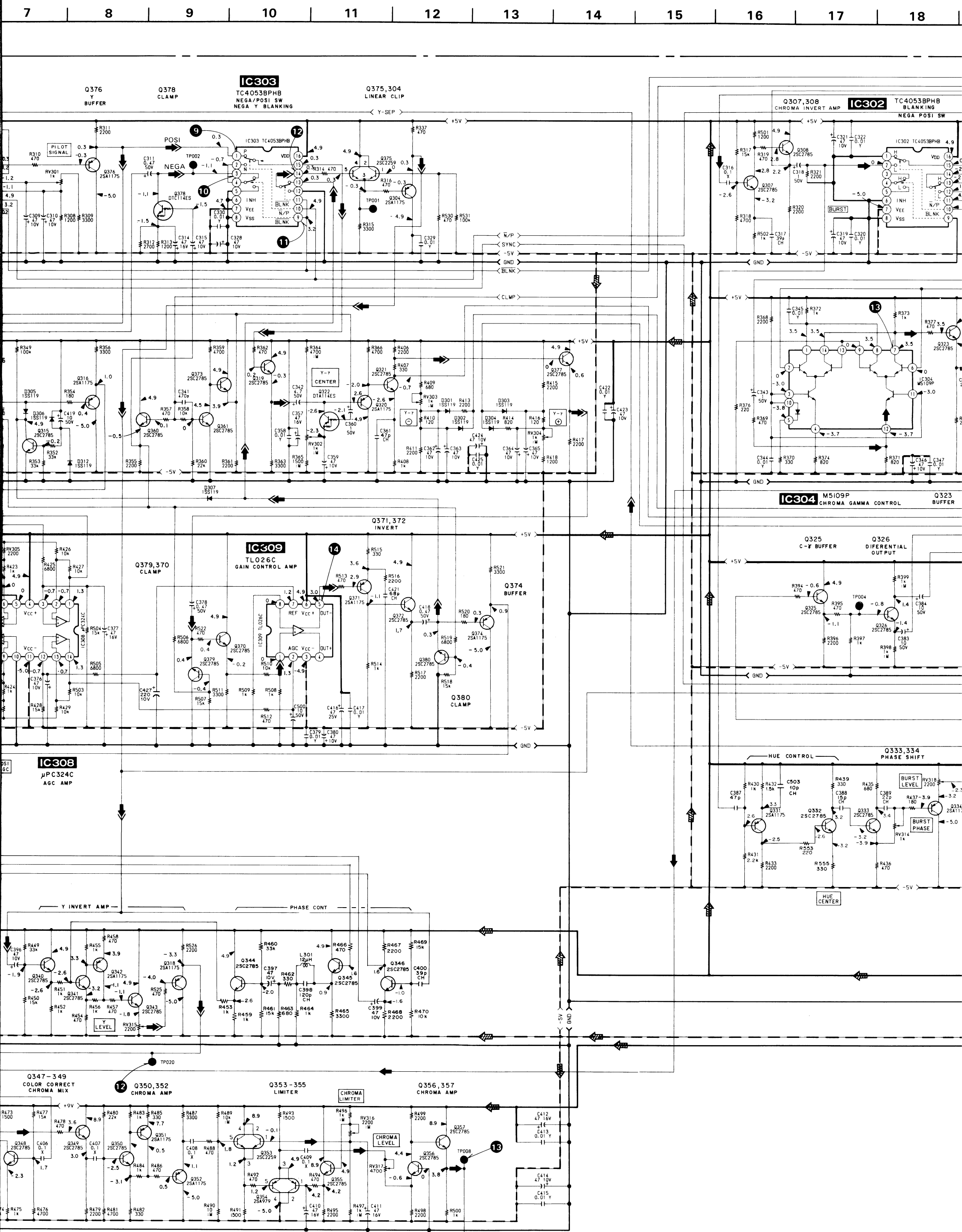
YS-6 BOARD

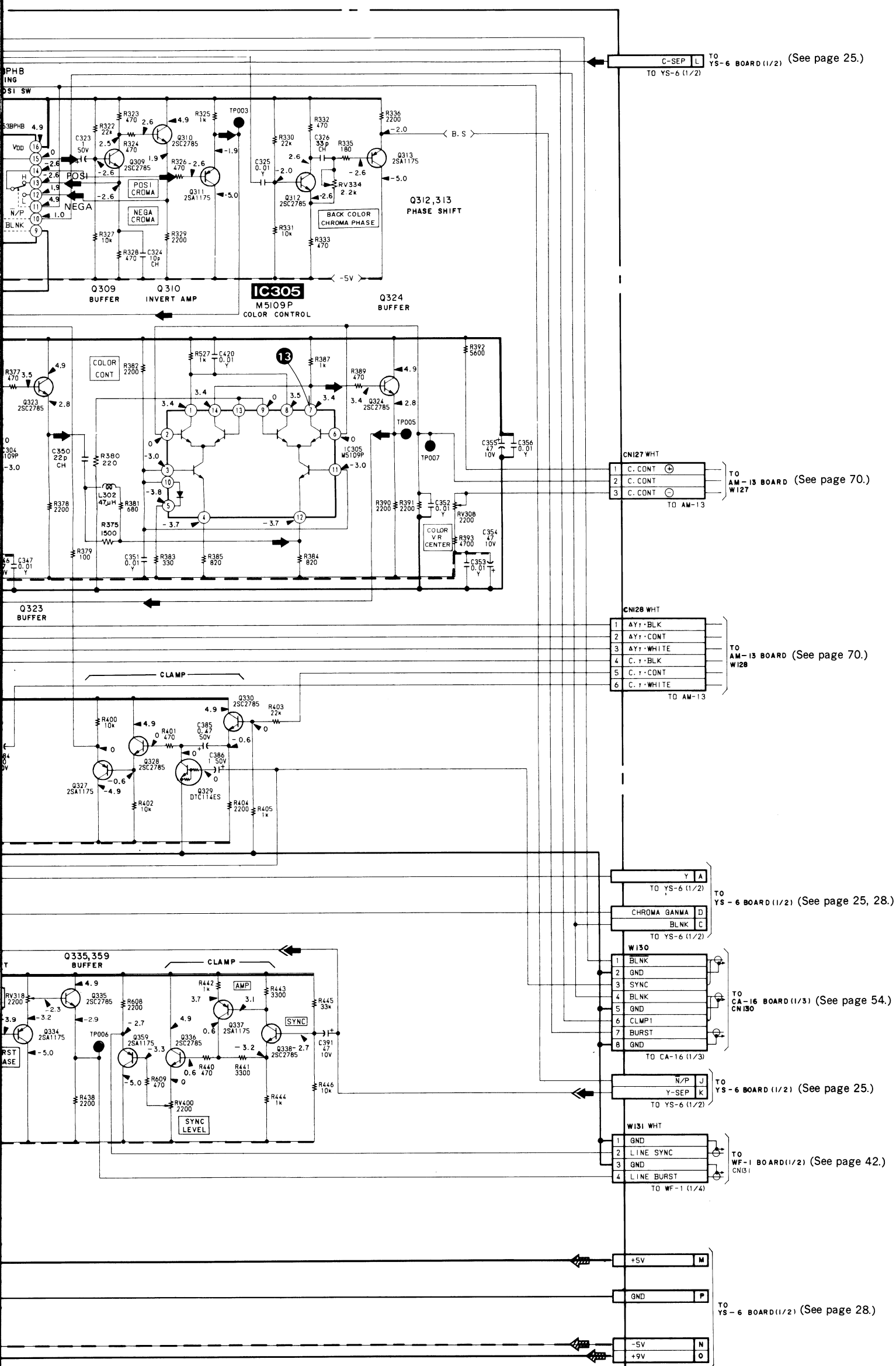
D101	C-5	Q222	C-6
D102	G-6	Q233	E-1
D103	G-6	Q301	C-7
D104	F-5	Q302	C-8
D201	B-4	Q303	C-8
D203	D-2	Q304	A-11
D204	B-1	Q305	D-8
D205	C-1	Q306	D-8
D209	B-6	Q307	E-11
D210	B-5	Q308	E-11
D211	J-3	Q309	E-12
D233	E-2	Q310	E-12
D301	H-7	Q311	F-12
D302	H-7	Q312	F-11
D303	H-7	Q313	F-10
D304	H-7	Q314	E-8
D305	E-7	Q315	E-8
D307	E-8	Q316	D-8
D309	G-9	Q318	J-8
D310	G-9	Q319	B-12
D311	G-9	Q320	C-12
D312	F-7	Q321	C-11
		Q322	C-12
IC101	D-5	Q323	H-11
IC102	G-5	Q324	H-10
IC103	F-4	Q325	F-11
IC104	I-5	Q326	F-11
IC201	B-1	Q327	F-12
IC202	E-2	Q328	F-12
IC203	C-2	Q329	F-12
IC204	B-9	Q330	F-12
IC205	G-2	Q331	E-10
IC207	H-2	Q332	E-11
IC208	I-1	Q333	E-11
IC301	D-7	Q334	E-12
IC302	E-12	Q335	E-12
IC303	B-11	Q336	D-12
IC304	H-12	Q337	D-11
IC305	H-11	Q338	D-11
IC306	E-7	Q340	I-7
IC307	G-8	Q341	I-7
IC308	G-8	Q342	I-7
IC309	E-9	Q343	I-8
		Q344	H-7
Q101	C-5	Q345	H-8
Q102	C-5	Q346	I-8
Q103	D-5	Q347	H-11
Q104	D-5	Q348	H-11
Q105	D-6	Q349	I-12
Q106	E-5	Q350	I-11
Q107	E-4	Q351	I-11
Q108	E-4	Q352	I-11
Q109	H-6	Q353	I-11
Q110	H-6	Q354	J-12
Q111	H-5	Q355	I-12
Q112	H-5	Q356	J-11
Q113	H-6	Q357	J-11
Q114	H-4	Q359	C-12
Q115	H-5	Q360	B-10
Q116	G-6	Q361	B-10
Q117	F-5	Q370	D-8
Q118	F-5	Q371	D-9
Q120	F-5	Q372	D-9
Q121	F-5	Q373	B-10
Q122	I-4	Q374	E-9
Q123	I-5	Q375	A-11
Q124	I-4	Q376	D-8
Q125	I-6	Q377	C-11
Q126	I-5	Q378	C-12
Q127	D-5	Q379	D-8
Q201	B-7	Q380	C-10
Q202	B-4		
Q203	D-1		
Q204	D-1		
Q205	C-1		
Q206	C-1		
Q207	C-3		
Q208	C-2		
Q209	B-2		
Q211	B-7		
Q212	B-5		
Q213	B-5		
Q214	B-3		
Q215	B-3		
Q216	H-2		
Q217	H-2		
Q218	H-2		
Q219	H-2		
Q220	I-2		
Q221	I-2		



—Ref. No. YS-6 BOARD: 1000 series—

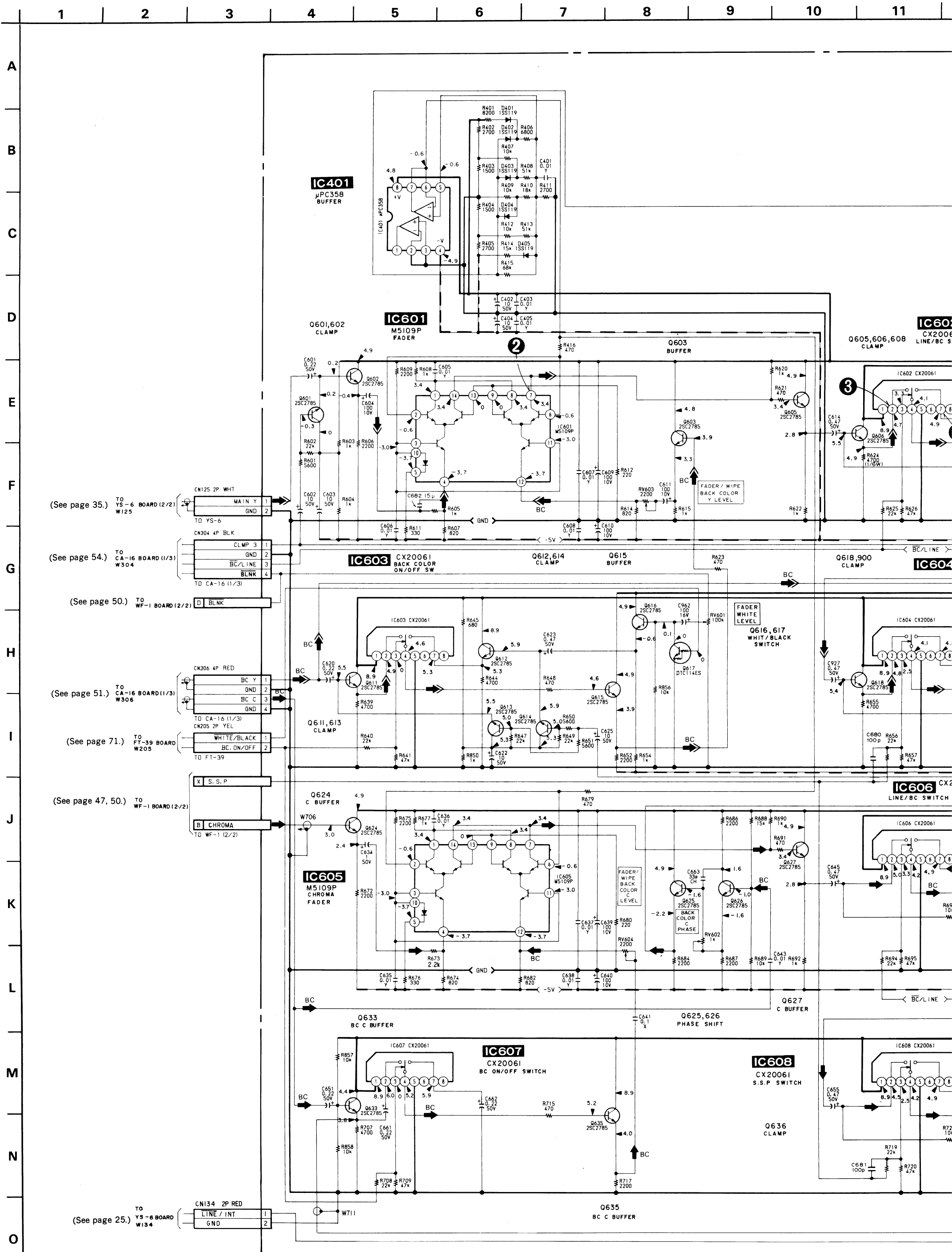


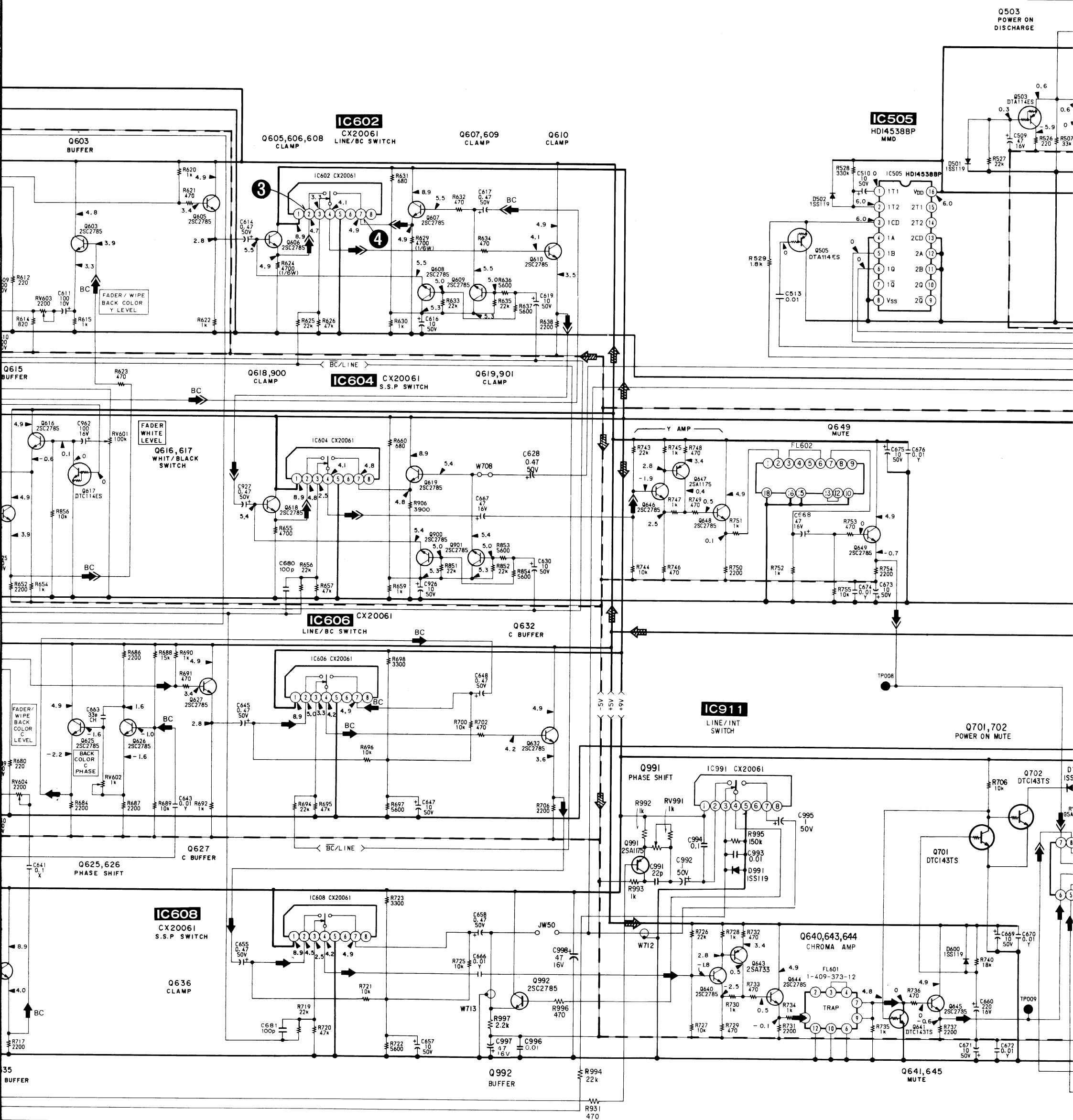


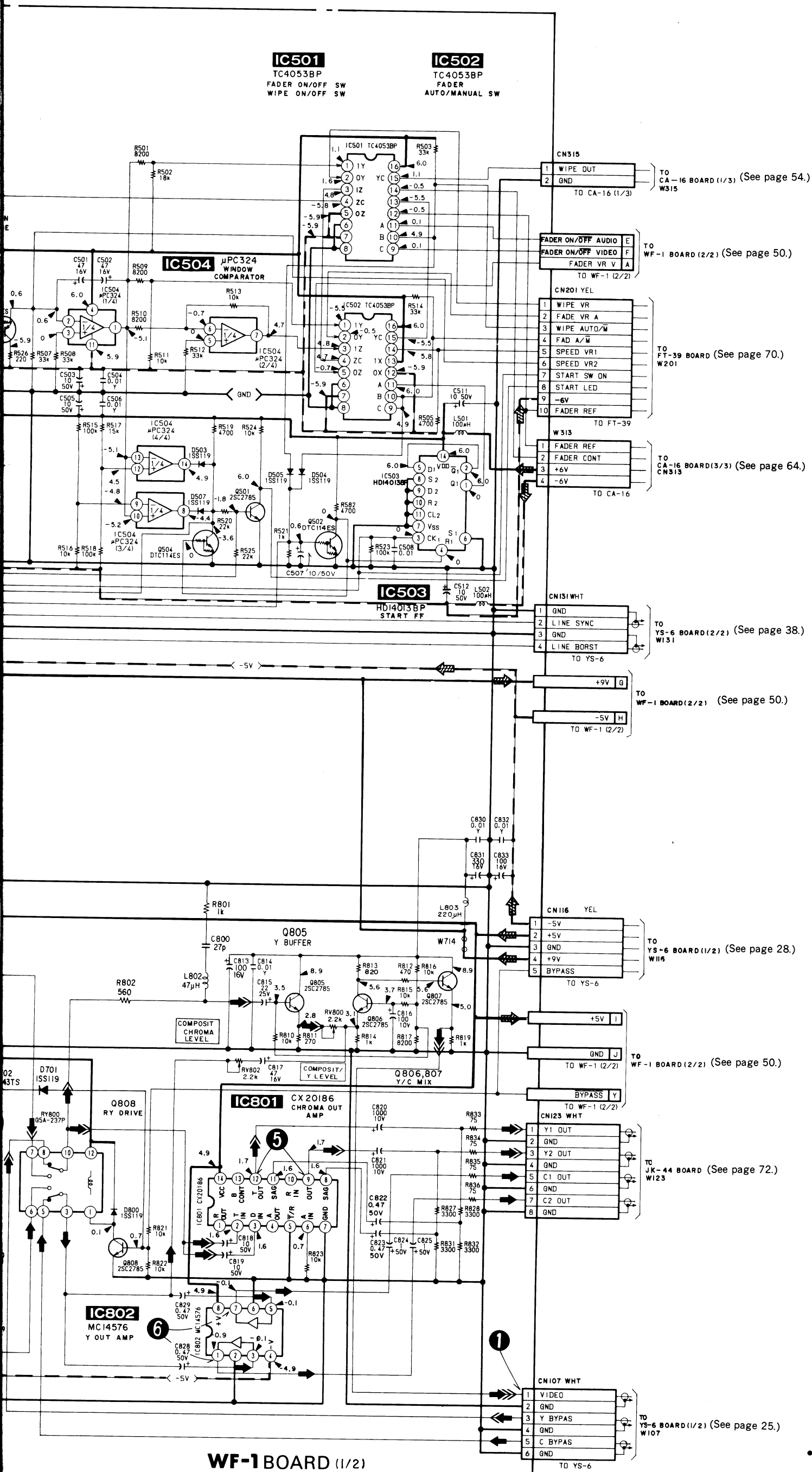


YS-6 BOARD (2/2)

- Signal path
- ➡ : REC Y Signal
- ➡ : REC CHROMA Signal
- ➡➡ : REC Y/CHROMA Signal

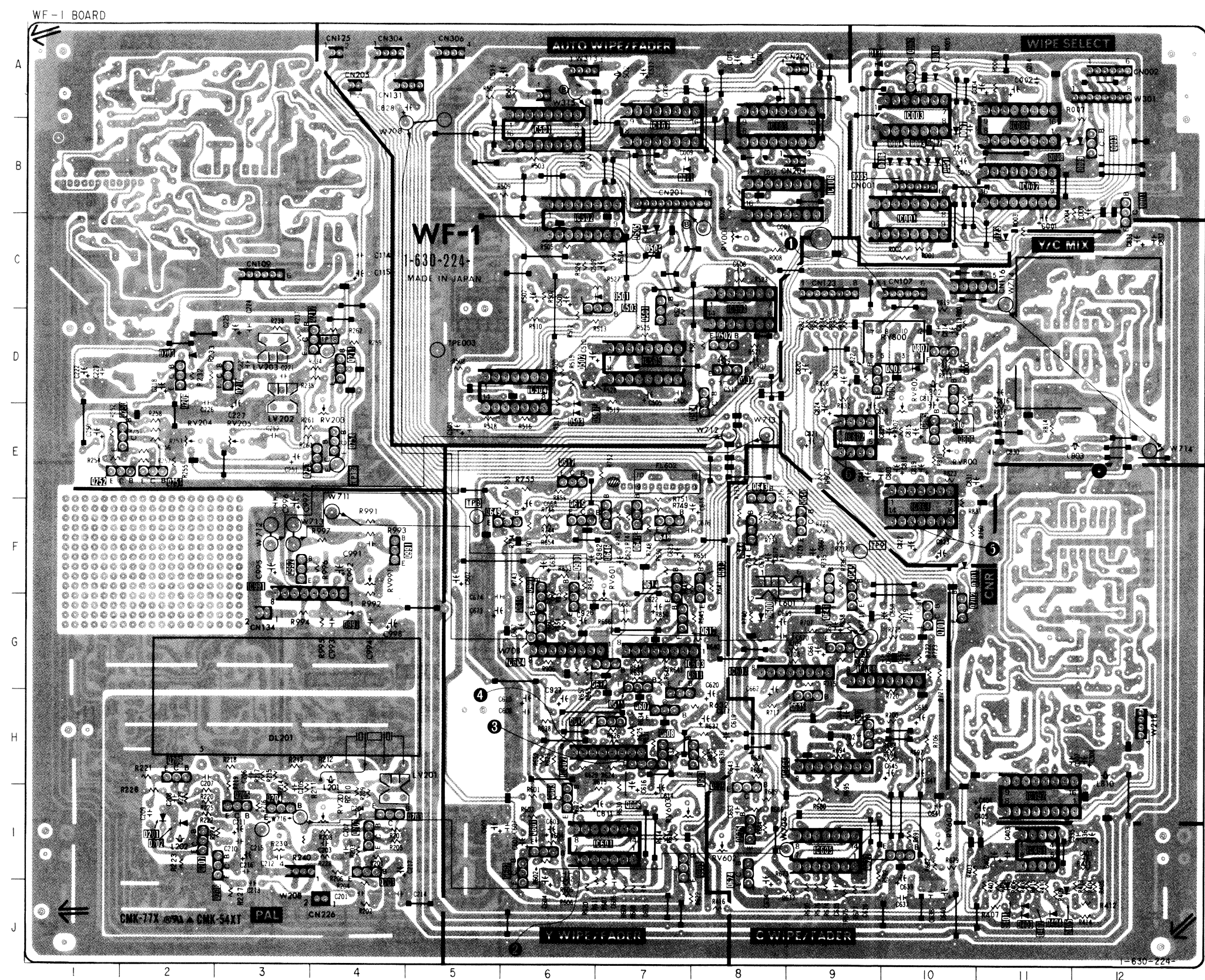






- Signal path
- ➡ : REC Y Signal
- ➡ : REC CHROMA Signal
- ➡ : REC Y/CHROMA Signal

WF-1 (Y/C COLOR CONTROL) PRINTED WIRING BOARD
 —Ref. No. WF-1 BOARD: 2000 series—



WF-1 BOARD

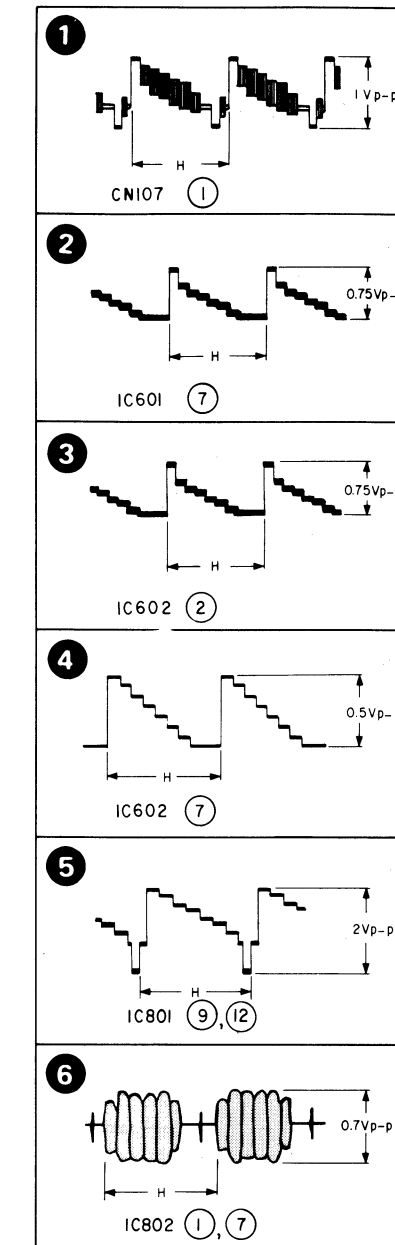
D001	B-10
D002	B-10
D003	B-10
D004	B-10
D005	B-10
D006	B-9
D007	A-10
D008	B-11
D009	B-11
D010	A-10
D011	B-7
D123	C-11
D130	A-9
D201	I-2
D202	I-2
D203	D-2
D401	J-11
D402	J-11
D403	J-11
D404	J-11
D405	J-11
D501	C-6
D502	D-6
D503	E-6
D504	C-7
D505	C-7
D507	E-6
D600	G-8
D701	F-10
D800	D-10
D991	G-4

IC001	B-10
IC002	B-11
IC003	A-10
IC004	A-11
IC105	A-8
IC106	B-9
IC107	A-7
IC302	I-11
IC401	I-11
IC501	B-6
IC502	B-6
IC503	C-8
IC504	D-6
IC505	D-7
IC601	I-7
IC602	H-6
IC603	G-7
IC604	Q-6
IC605	I-9
IC606	H-9
IC607	G-8
IC608	G-9
IC801	E-10
IC802	E-9
IC991	F-3

Q001	B-12
Q002	A-10
Q003	B-12
Q201	I-4
Q202	I-4
Q203	I-4
Q204	I-3
Q205	I-3
Q206	H-2
Q207	I-2
Q208	I-2
Q209	D-2
Q210	D-3
Q211	D-4
Q212	D-4
Q250	E-1
Q251	E-2
Q252	E-1
Q253	E-4
Q254	E-4
Q501	C-7
Q502	D-8
Q503	C-6
Q504	D-8
Q505	D-8
Q601	I-6
Q602	I-6
Q603	I-6
Q605	I-7
Q606	H-7
Q607	H-7
Q608	H-7

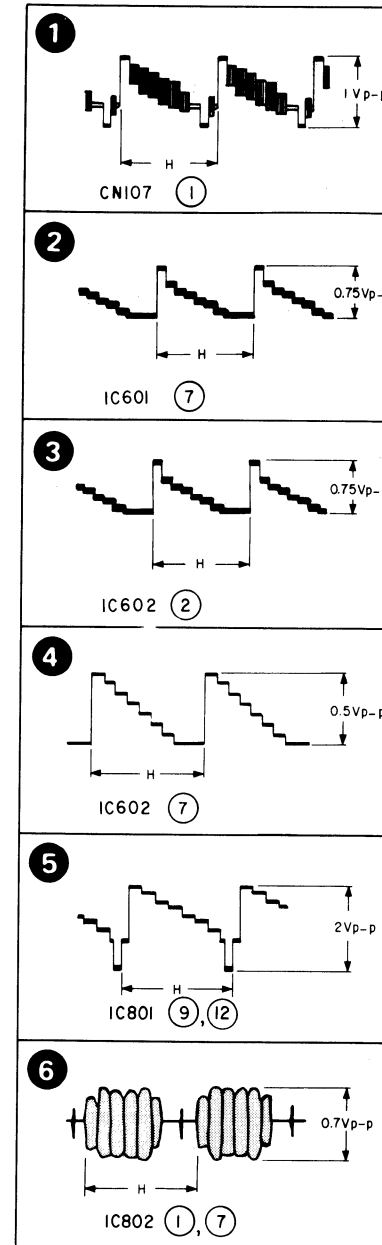
Q609	H-7
Q610	H-7
Q611	G-7
Q612	G-7
Q613	F-7
Q614	F-7
Q615	G-7
Q616	F-6
Q617	E-6
Q618	G-6
Q619	G-6
Q624	I-8
Q625	I-8
Q626	H-8
Q627	I-10
Q632	H-9
Q633	G-9
Q635	H-9
Q640	F-19
Q641	F-9
Q643	E-8
Q644	F-8
Q645	F-9
Q646	F-7
Q647	F-7
Q648	F-7
Q649	F-5
Q701	G-10
Q702	G-10
Q805	E-10
Q806	D-10
Q807	D-10
Q808	D-9
Q900	F-6
Q901	F-6
Q991	F-4
Q992	F-3

WF-1 BOARD



WF-1 (Y/C COLOR CONTROL) PRINTED WIRING BOARD
—Ref. No. WF-1 BOARD: 2000 series—

WF-1 BOARD



WF-1 BOARD

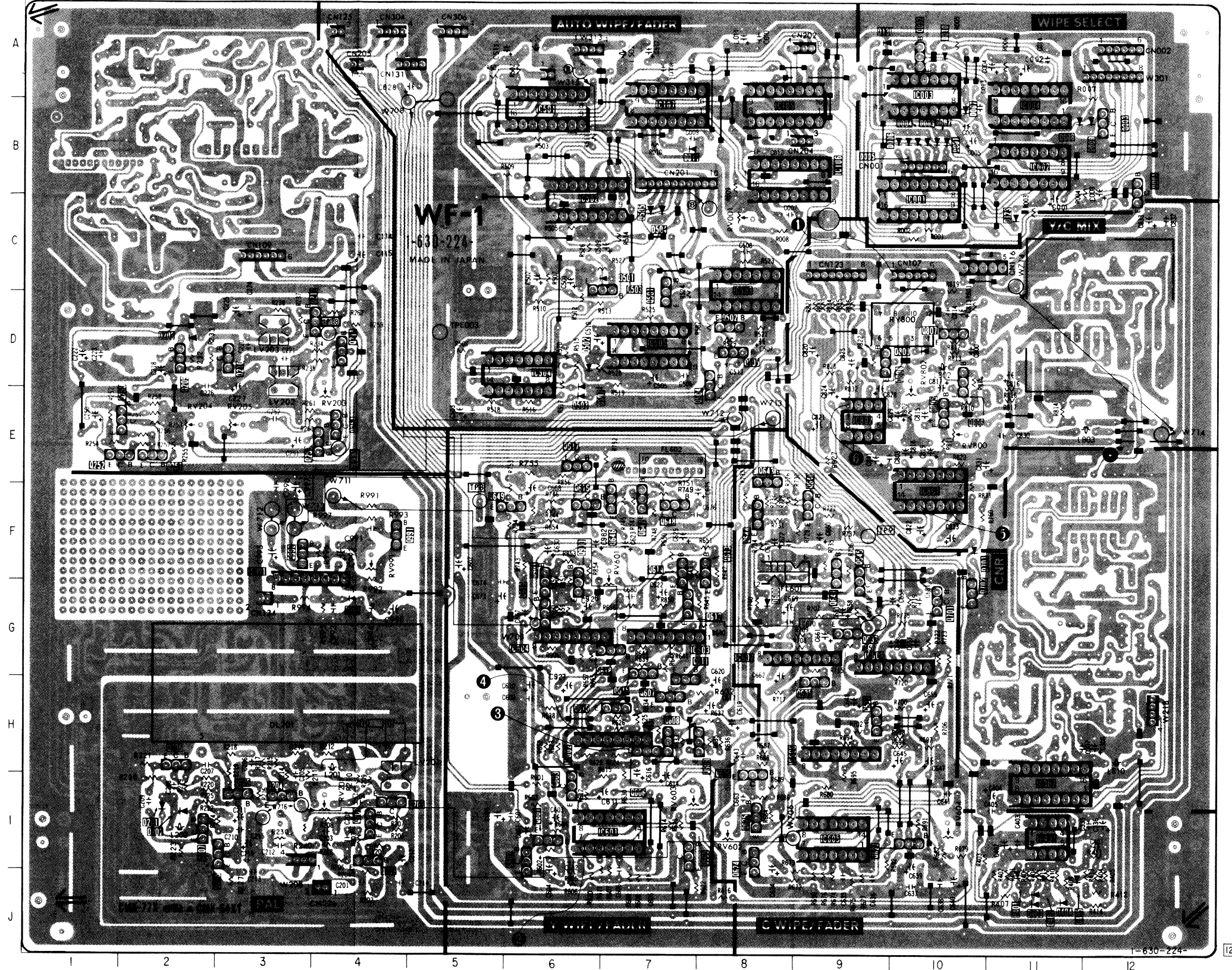
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D002 B-10
D003 B-10
D004 B-10
D005 B-10
D006 B-9
D007 A-10
D008 B-11
D009 B-11
D010 A-10
D011 B-7
D123 C-11
D130 A-9
D201 I-2
D202 I-2
D203 D-2
D401 J-11
D402 J-11
D403 J-11
D404 J-11
D405 J-11
D501 C-6
D502 D-6
D503 E-6
D504 C-7
D505 C-7
D507 E-6
D600 G-8
D701 F-10
D800 D-10
D991 G-4

IC001 B-10
IC002 B-11
IC003 A-10
IC004 A-11
IC105 A-8
IC106 B-9
IC107 A-7
IC302 I-11
IC401 I-11
IC501 B-6
IC502 B-6
IC503 C-8
IC504 D-6
IC505 D-7
IC601 I-7
IC602 H-6
IC603 G-7
IC604 Q-6
IC605 I-9
IC606 H-9
IC607 G-8
IC608 G-9
IC801 E-10
IC802 E-9
IC991 F-3

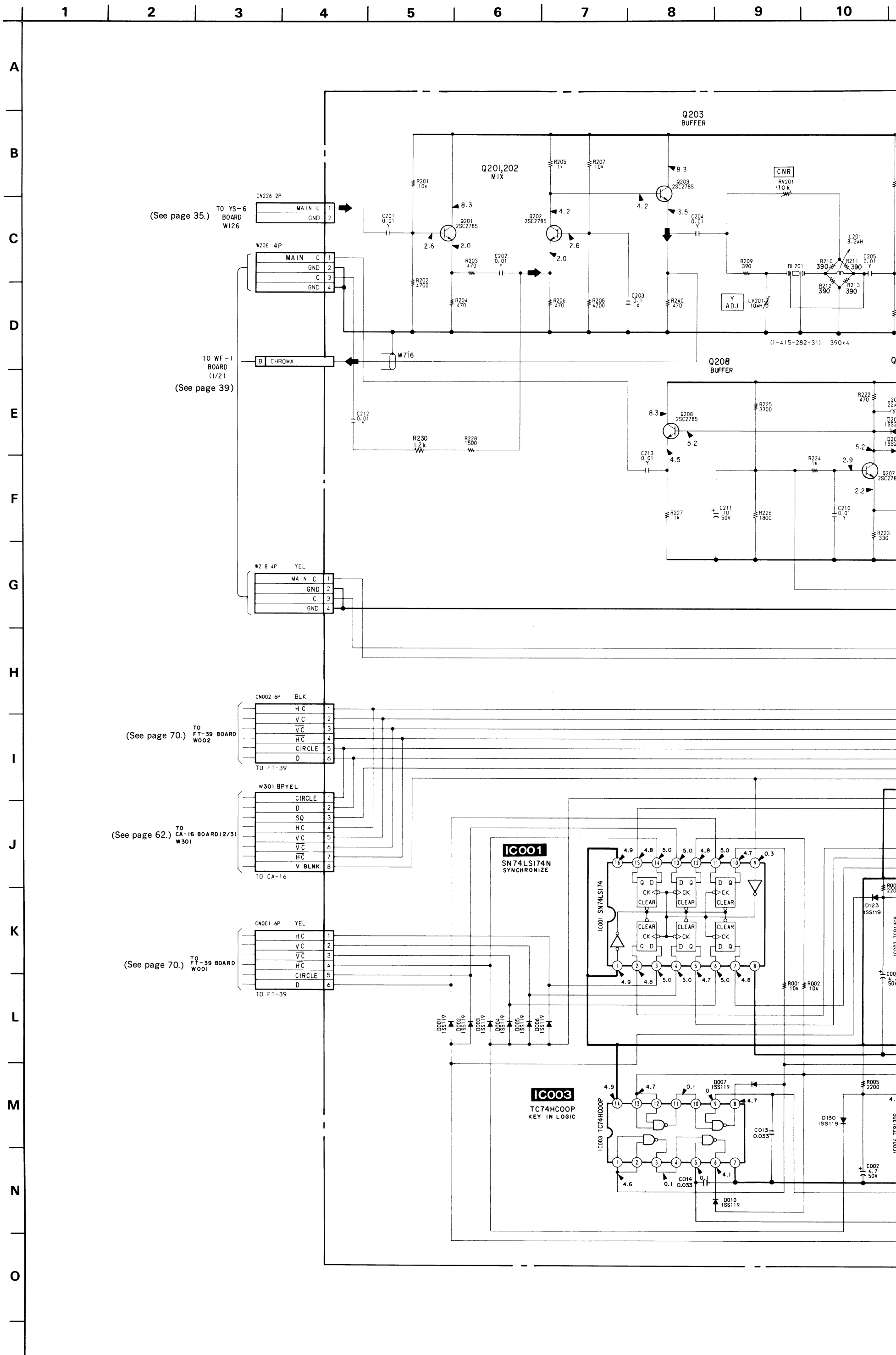
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Q002 A-10
Q003 B-12
Q201 I-4
Q202 I-4
Q203 I-4
Q204 I-3
Q205 I-3
Q206 H-2
Q207 I-2
Q208 I-2
Q209 D-2
Q210 D-3
Q211 D-4
Q212 D-4
Q250 E-1
Q251 E-2
Q252 E-1
Q253 E-4
Q254 E-4
Q501 C-7
Q502 D-8
Q503 C-6
Q504 D-8
Q505 D-8
Q601 I-6
Q602 I-6
Q603 I-6
Q605 I-7
Q606 H-7
Q607 H-7
Q608 H-7

Q609 H-7
Q610 H-7
Q611 G-7
Q612 G-7
Q613 F-7
Q614 F-7
Q615 G-7
Q616 F-6
Q617 E-6
Q618 G-6
Q619 G-6
Q624 I-8
Q625 I-8
Q626 H-8
Q627 I-10
Q632 H-9
Q633 G-9
Q635 H-9
Q640 F-19
Q641 F-9
Q643 E-8
Q644 F-8
Q645 F-9
Q646 F-7
Q647 F-7
Q648 F-7
Q649 F-5
Q701 G-10
Q702 G-10
Q805 E-10
Q806 D-10
Q807 D-10
Q808 D-9
Q900 F-6
Q901 F-6
Q991 F-4
Q992 F-3

WF-1 BOARD



WF-1 (Y/C COLOR CONTROL) SCHEMATIC DIAGRAM
 —Ref. No. WF-1 BOARD: 2000 series—



Q253,254
BUFFER

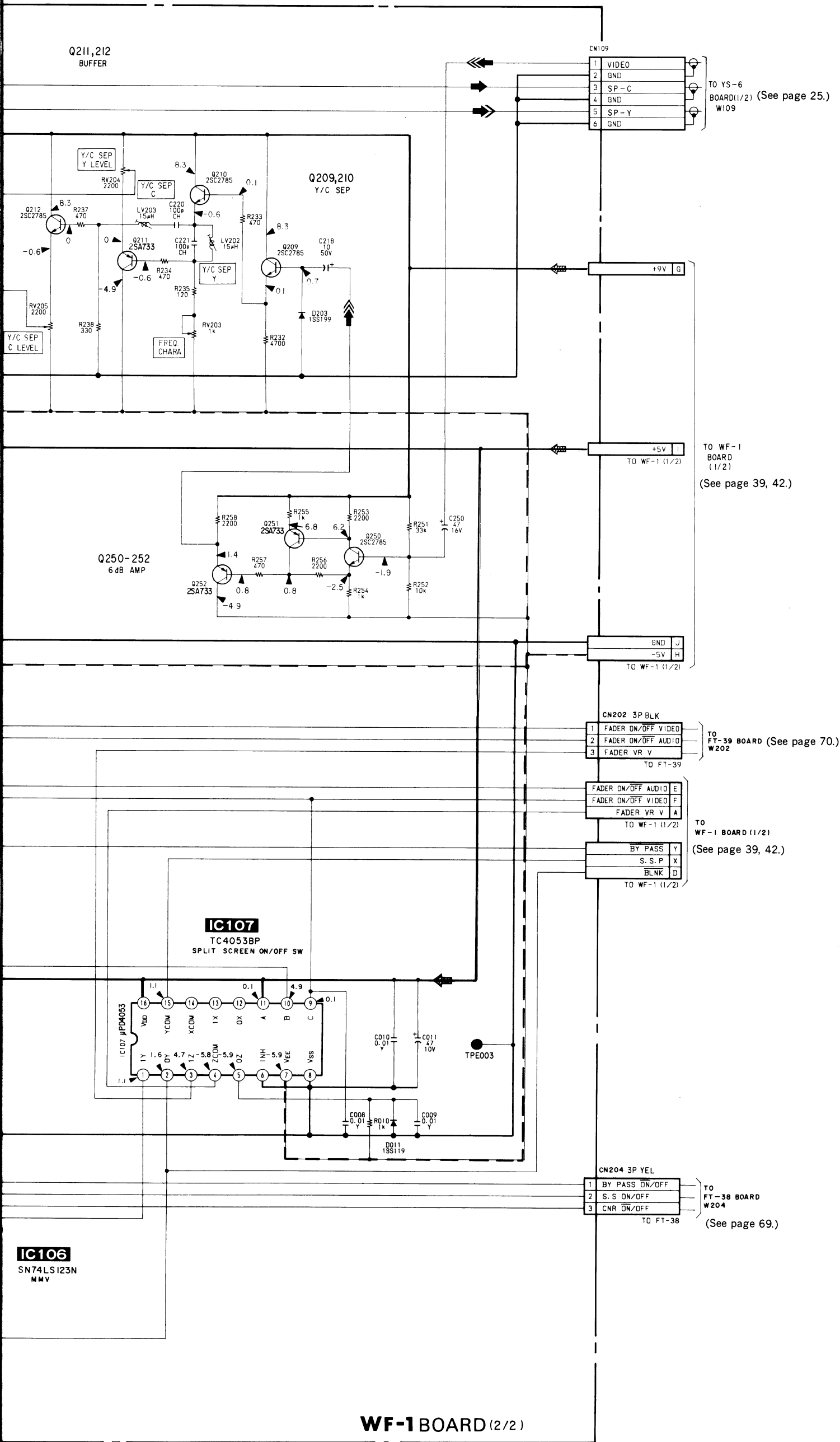
IC302
CNR ON/OFF

IC105
SN74LS174N
SYNCHRONIZE

IC002
TC9130P
TRIGGER FF

IC004
TC9130P
TRIGGER FF

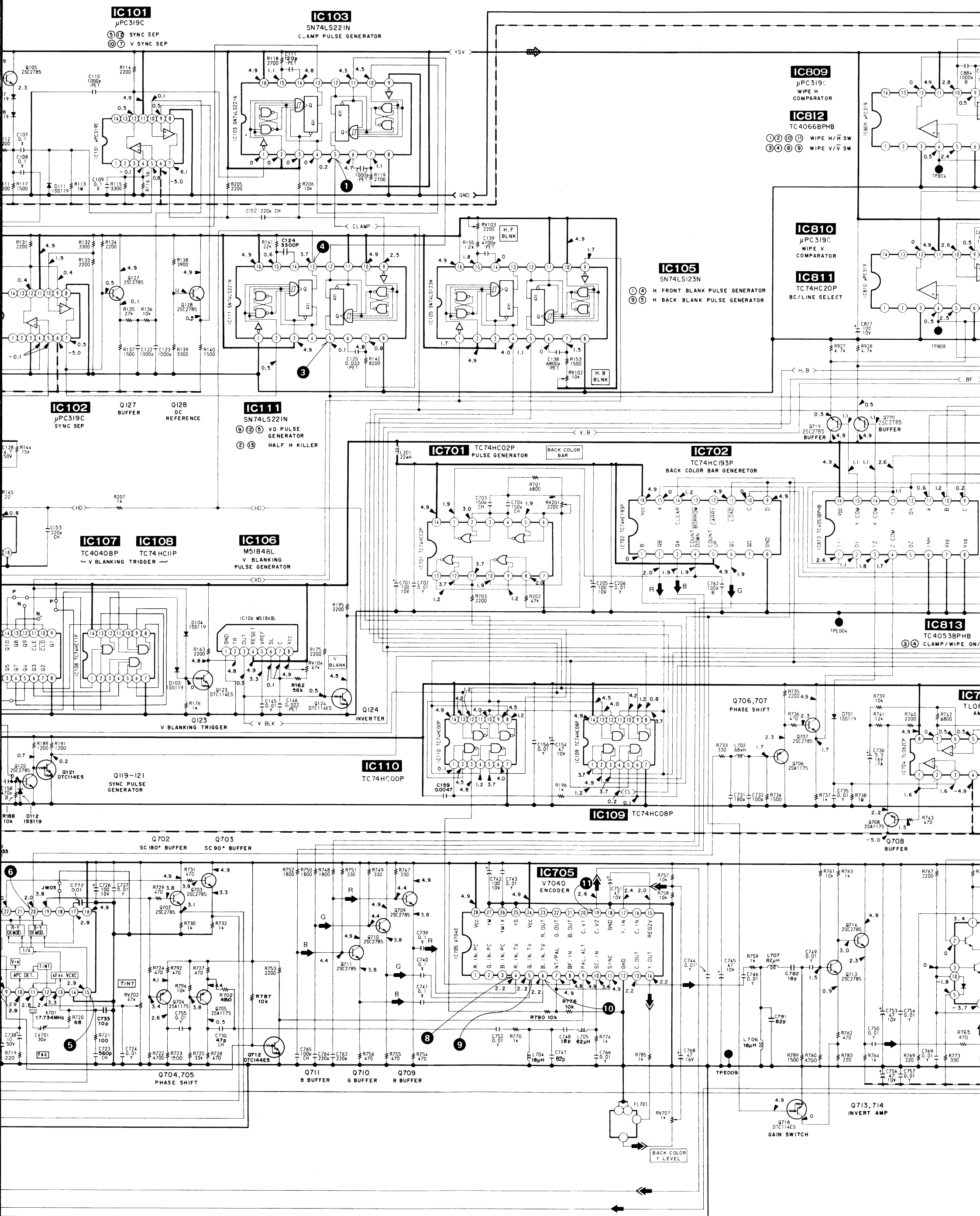
IC1
SN74
MM

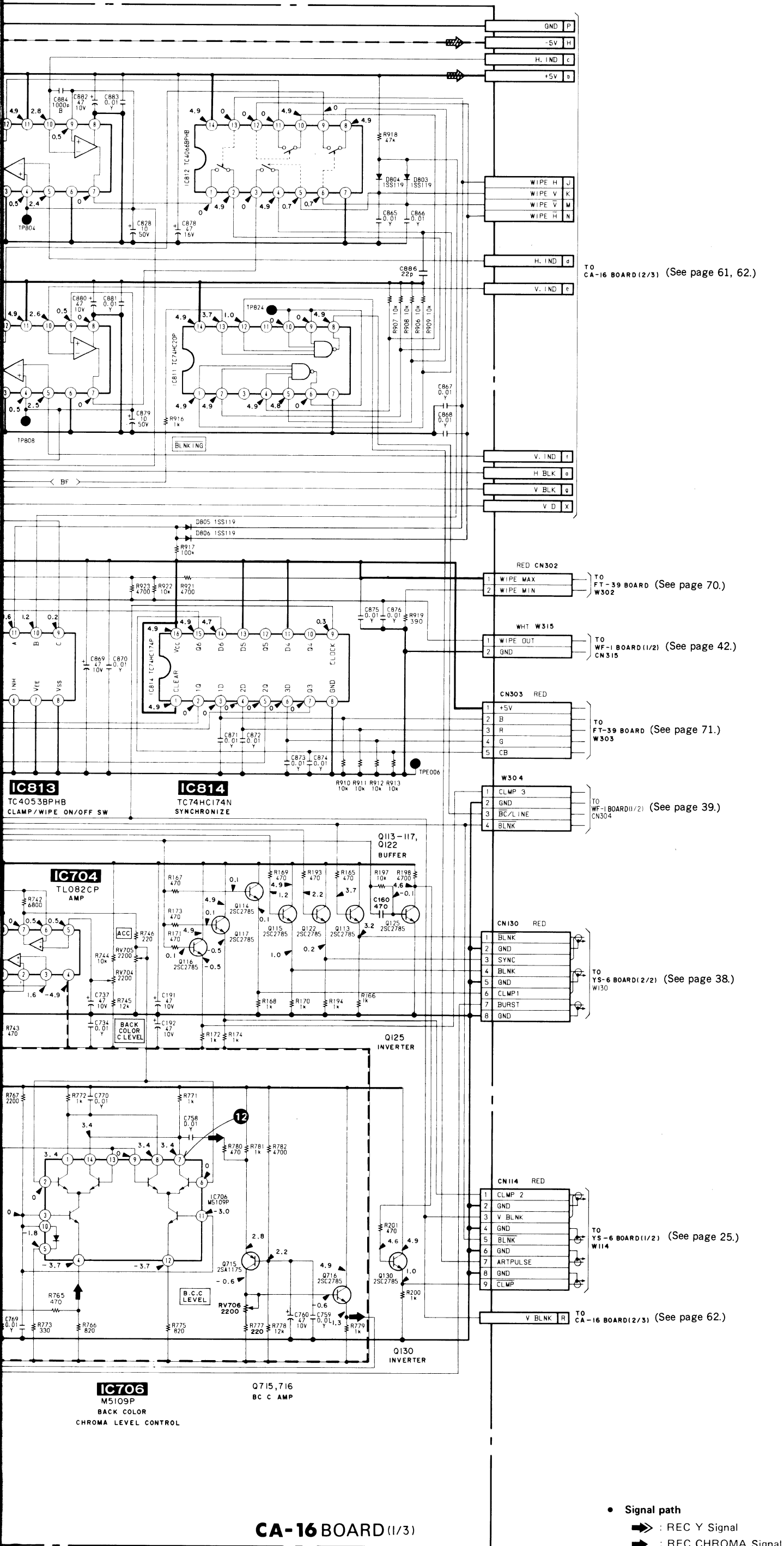


- **Signal path**
- ➡ : REC Y Signal
- ➡ : REC CHROMA Signal
- ➡➡ : REC Y/CHROMA Signal

—Ref. No. CA-16 BOARD: 3000 series—







TO CA-16 BOARD (2/3) (See page 61, 62.)

TO FT-39 BOARD (See page 70.)

TO WF-1 BOARD (1/2) (See page 42.)

TO FT-39 BOARD (See page 71.)

TO WF-1 BOARD (1/2) (See page 39.)

TO YS-6 BOARD (2/2) (See page 38.)

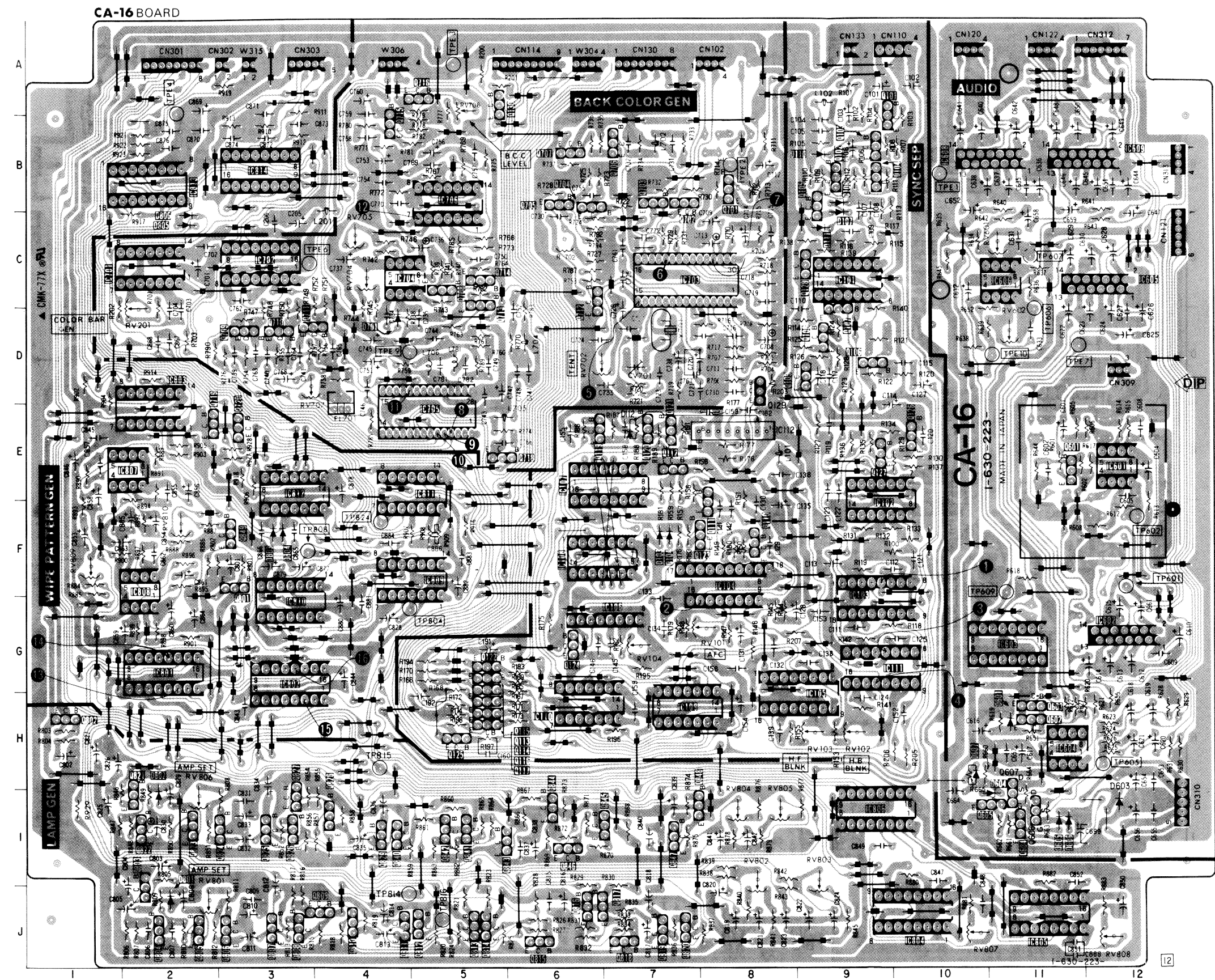
TO YS-6 BOARD (1/2) (See page 25.)

TO CA-16 BOARD (2/3) (See page 62.)

• Signal path

➡ : REC Y Signal

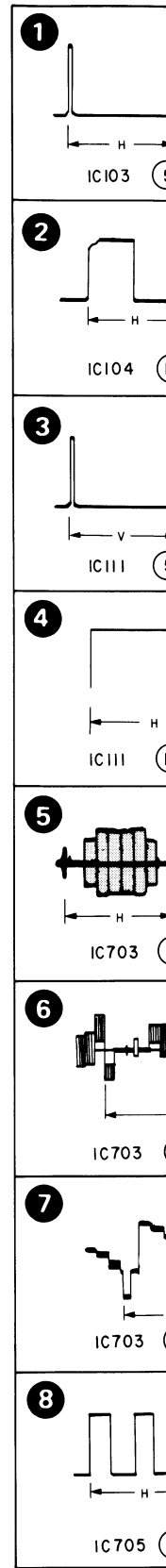
➡ : REC CHROMA Signal

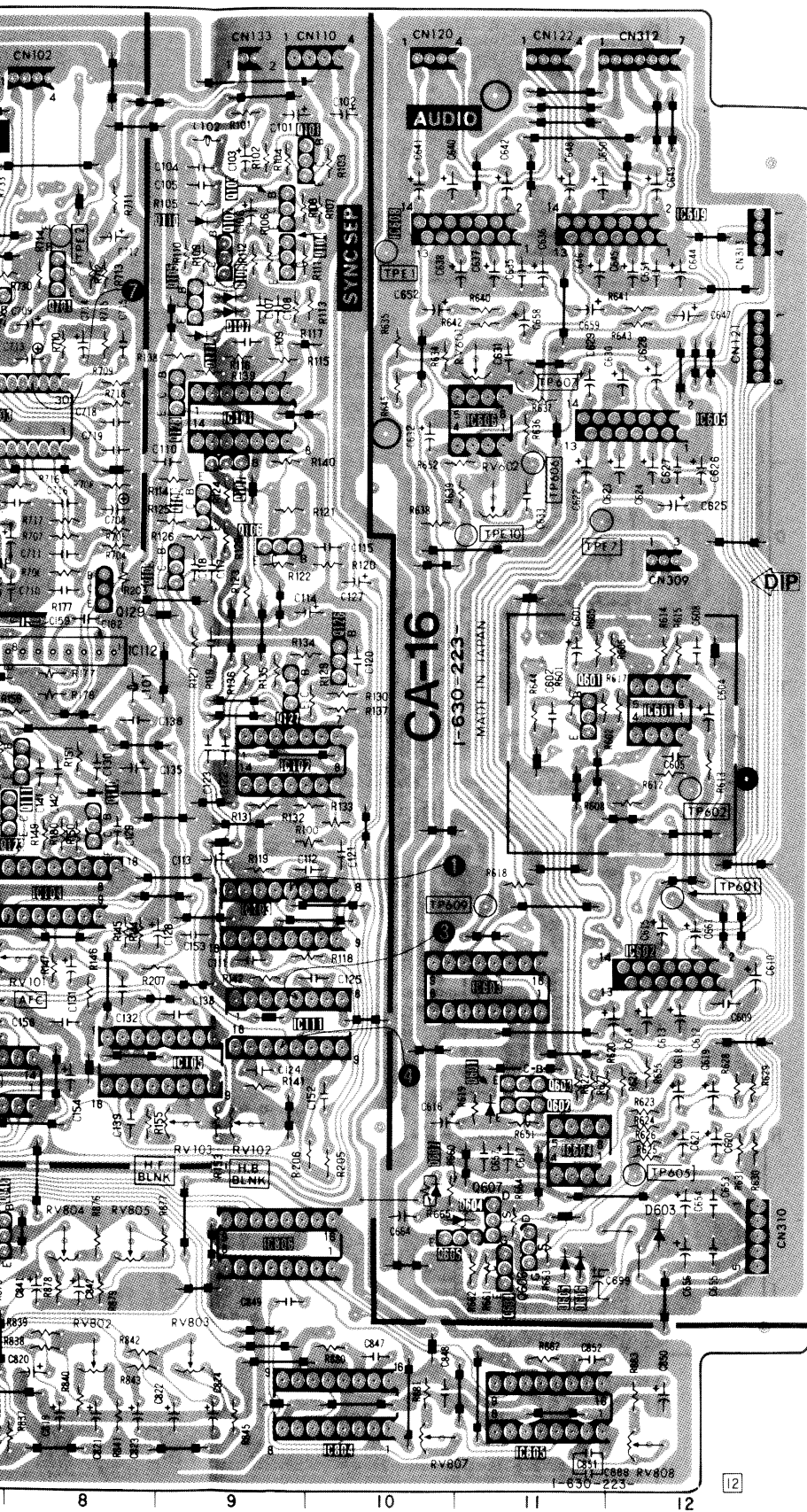


CA-16 BOARD

D103	F-7	Q130	B-5
D104	F-7	Q601	E-11
D107	C-9	Q602	H-11
D108	C-9	Q603	H-11
D110	B-9	Q604	I-11
D111	C-9	Q605	I-10
D112	E-7	Q606	I-11
D601	H-11	Q607	I-11
D603	I-12	Q701	B-8
D604	I-11	Q701	B-7
D605	I-11	Q702	B-7
D606	I-11	Q703	B-7
D607	H-10	Q704	C-6
D701	D-4	Q705	C-6
D801	J-2	Q706	B-7
D802	H-2	Q707	B-6
D803	F-3	Q708	C-5
D804	F-3	Q709	D-3
D805	C-2	Q710	D-3
D806	C-2	Q711	D-3
		Q712	D-6
		Q713	D-5
		Q714	C-5
		Q715	B-4
		Q716	A-5
		Q718	E-5
		Q719	E-2
		Q720	E-3
		Q801	G-3
		Q802	H-1
		Q803	J-2
		Q804	J-2
		Q805	J-2
		Q806	J-3
		Q807	J-3
		Q808	J-3
		Q809	J-3
		Q810	J-4
		Q811	J-4
		Q812	J-5
		Q813	J-5
		Q814	J-5
		Q815	J-6
		Q816	J-6
		Q817	J-6
		Q818	J-7
		Q819	J-7
		Q820	J-7
		Q821	I-2
		Q822	I-2
		Q823	I-2
		Q824	I-2
		Q825	I-3
		Q826	I-3
		Q827	I-3
		Q828	I-4
		Q829	I-4
		Q840	I-4
		Q841	I-5
		Q842	I-5
		Q843	I-5
		Q844	I-6
		Q845	I-6
		Q846	I-6
		Q847	I-7
		Q848	I-7
		Q849	F-3
IC101	C-9		
IC102	F-9		
IC103	G-9		
IC104	G-8		
IC105	H-9		
IC106	G-7		
IC107	E-6		
IC108	F-6		
IC109	H-7		
IC110	H-6		
IC111	G-9		
IC112	E-8		
IC601	G-12		
IC602	G-12		
IC603	G-11		
IC604	H-11		
IC605	C-12		
IC606	C-11		
IC608	B-10		
IC609	B-12		
IC701	C-2		
IC702	C-3		
IC703	C-7		
IC704	C-4		
IC705	E-5		
IC706	B-5		
IC801	G-2		
IC802	H-3		
IC803	D-2		
IC804	J-10		
IC805	J-11		
IC806	I-9		
IC807	E-2		
IC808	G-2		
IC809	F-5		
IC810	G-3		
IC811	F-5		
IC812	F-3		
IC813	B-2		
IC814	B-3		
Q101	B-9		
Q102	B-9		
Q103	B-9		
Q104	B-9		
Q105	B-9		
Q106	D-9		
Q107	D-9		
Q108	D-9		
Q109	D-9		
Q110	F-8		
Q111	F-8		
Q112	E-5		
Q113	H-5		
Q114	H-5		
Q115	H-5		
Q116	H-5		
Q117	H-5		
Q119	E-6		
Q120	E-7		
Q121	E-7		
Q122	G-5		
Q123	F-7		
Q124	G-6		
Q125	H-5		
Q126	E-10		
Q127	E-9		
Q128	C-9		
Q129	E-8		

CA-16 BOARD



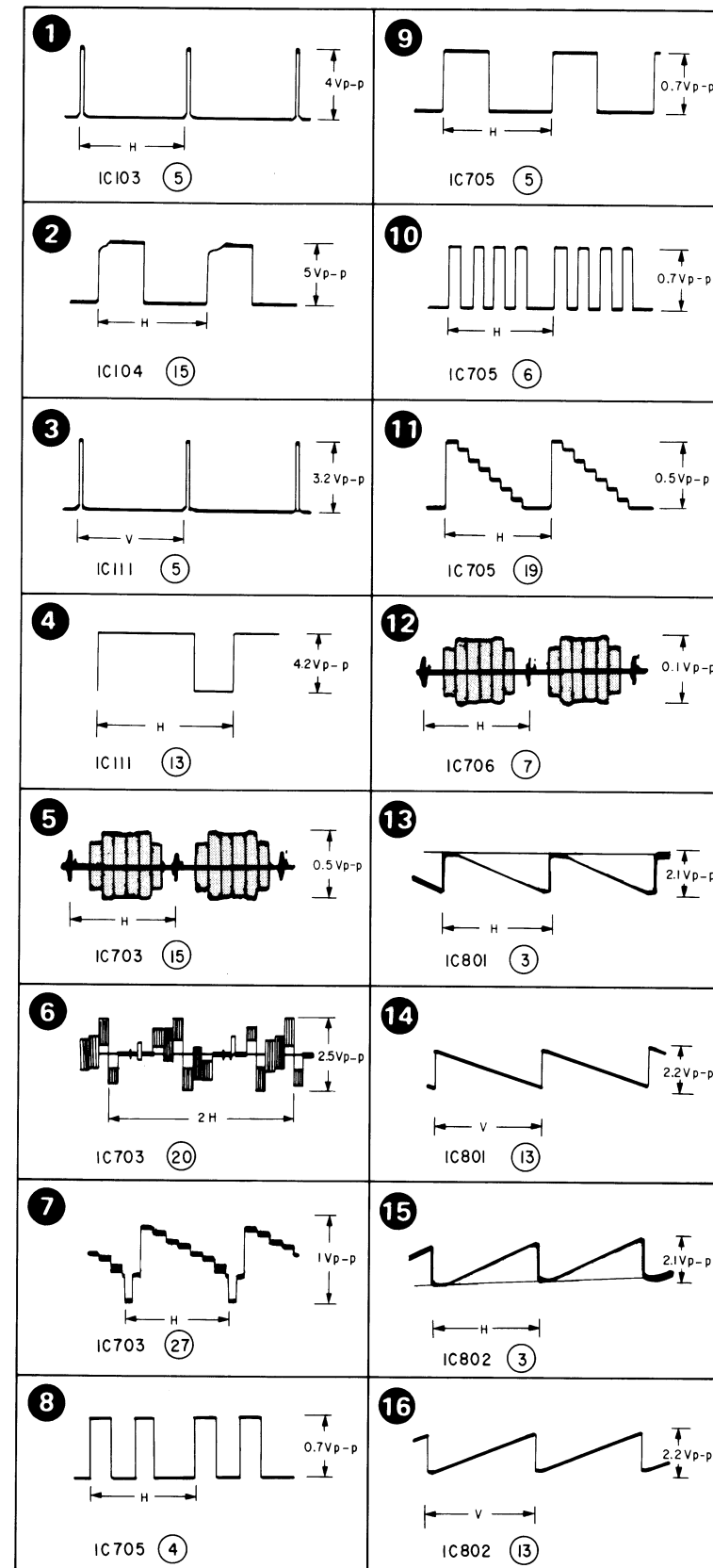


CA-16 BOARD

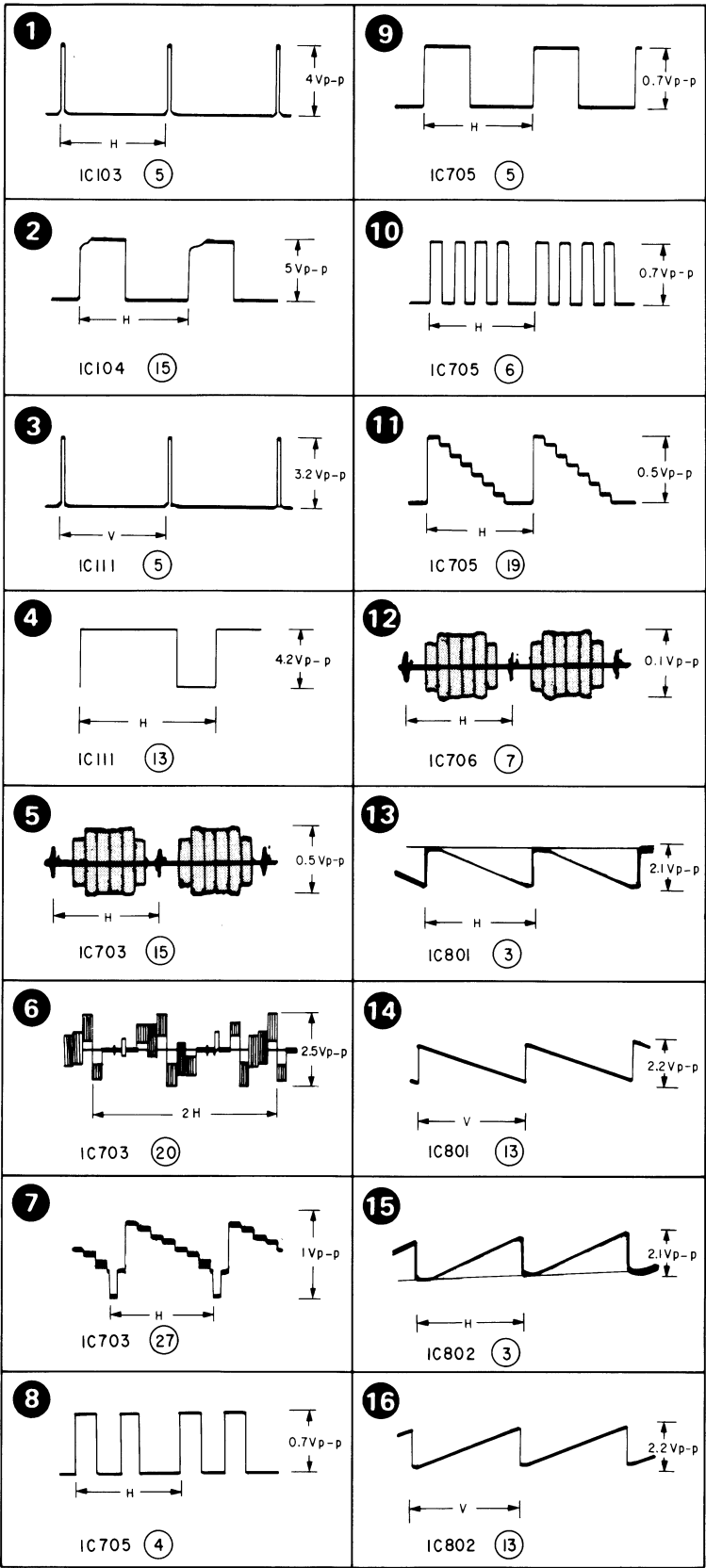
D103	F-7
D104	F-7
D107	C-9
D108	C-9
D110	B-9
D111	C-9
D112	E-7
D601	H-11
D603	I-12
D604	I-11
D605	I-11
D606	I-11
D607	H-10
D701	D-4
D801	J-2
D802	H-2
D803	F-3
D804	F-3
D805	C-2
D806	C-2
IC101	C-9
IC102	F-9
IC103	G-9
IC104	G-8
IC105	H-9
IC106	G-7
IC107	E-6
IC108	F-6
IC109	H-7
IC110	H-6
IC111	G-9
IC112	E-8
IC601	G-12
IC602	G-12
IC603	G-11
IC604	H-11
IC605	C-12
IC606	C-11
IC608	B-10
IC609	B-12
IC701	C-2
IC702	C-3
IC703	C-7
IC704	C-4
IC705	E-5
IC706	B-5
IC801	G-2
IC802	H-3
IC803	D-2
IC804	J-10
IC805	J-11
IC806	I-9
IC807	E-2
IC808	G-2
IC809	F-5
IC810	G-3
IC811	F-5
IC812	F-3
IC813	B-2
IC814	B-3
Q101	B-9
Q102	B-9
Q103	B-9
Q104	B-9
Q105	B-9
Q106	D-9
Q107	D-9
Q108	D-9
Q109	D-9
Q110	F-8
Q111	F-8
Q112	E-5
Q113	H-5
Q114	H-5
Q115	H-5
Q116	H-5
Q117	H-5
Q119	E-6
Q120	E-7
Q121	E-7
Q122	G-5
Q123	F-7
Q124	G-6
Q125	H-5
Q126	E-10
Q127	E-9
Q128	C-9
Q129	E-8

Q130	B-5
Q601	E-11
Q602	H-11
Q603	H-11
Q604	I-11
Q605	I-10
Q606	I-11
Q607	I-11
Q701	B-8
Q702	B-7
Q703	B-7
Q704	C-6
Q705	C-6
Q706	B-7
Q707	B-6
Q708	C-5
Q709	D-3
Q710	D-3
Q711	D-3
Q712	D-6
Q713	D-5
Q714	C-5
Q715	B-4
Q716	A-5
Q718	E-5
Q719	E-2
Q720	E-3
Q801	G-3
Q802	H-1
Q803	J-2
Q804	J-2
Q805	J-2
Q806	J-3
Q807	J-3
Q808	J-3
Q809	J-3
Q810	J-4
Q811	J-4
Q812	J-5
Q813	J-5
Q814	J-5
Q815	J-6
Q816	J-6
Q817	J-6
Q818	J-7
Q819	J-7
Q820	J-7
Q821	I-2
Q822	I-2
Q823	I-2
Q824	I-2
Q825	I-3
Q826	I-3
Q827	I-3
Q828	I-4
Q829	I-4
Q840	I-4
Q841	I-5
Q842	I-5
Q843	I-5
Q844	I-6
Q845	I-6
Q846	I-6
Q847	I-7
Q848	I-7
Q849	F-3

CA-16 BOARD



CA-16 BOARD

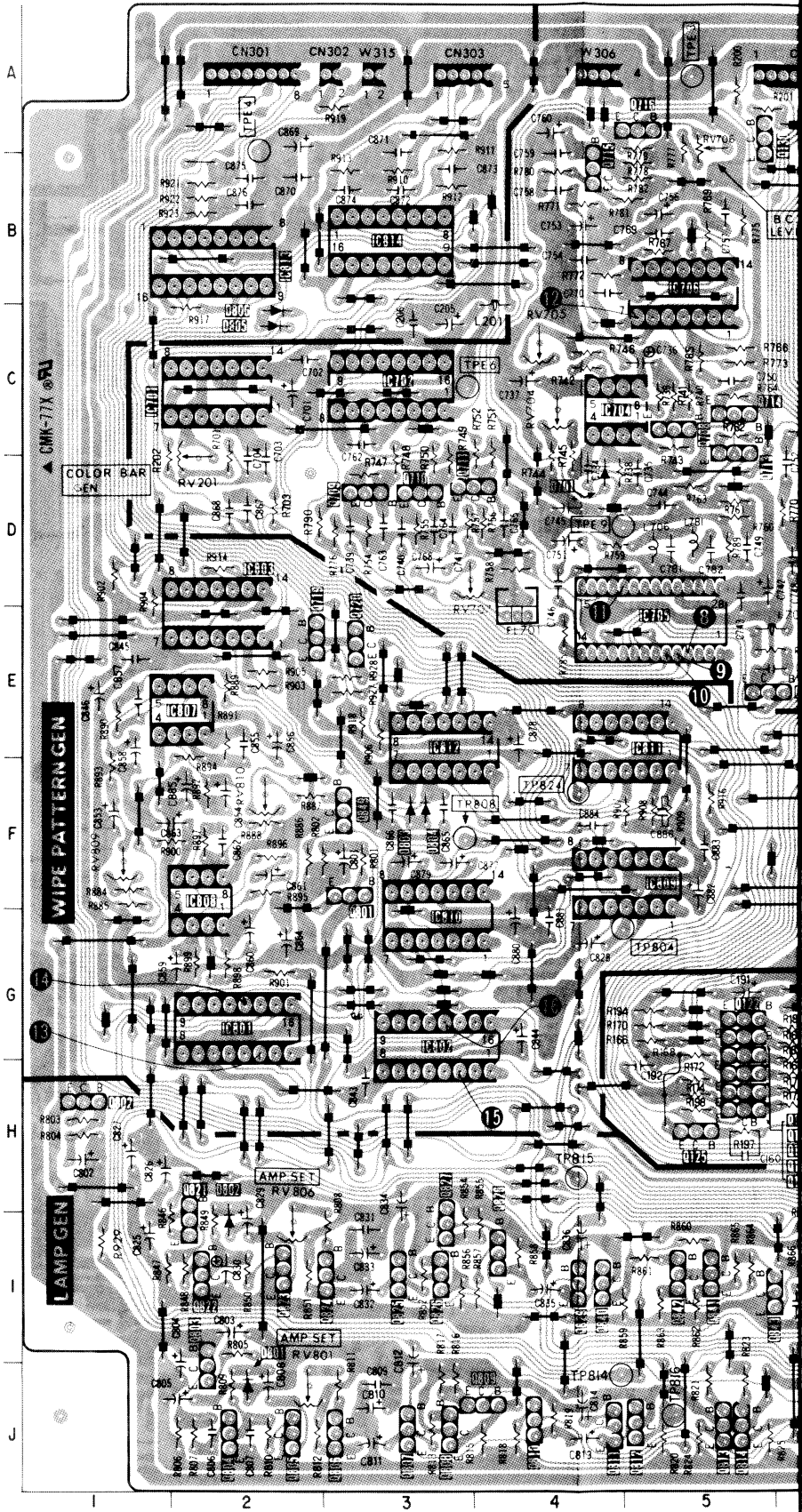


CA-16 BOARD

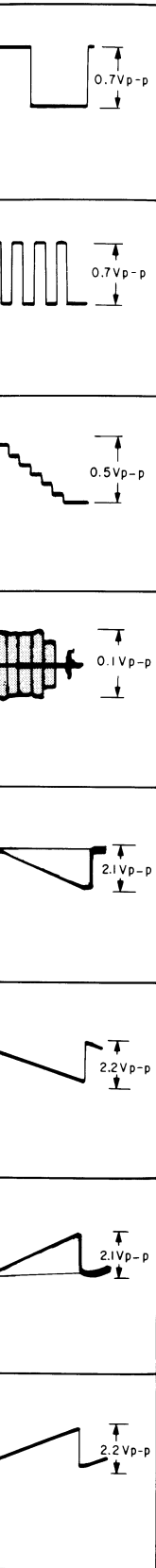
D103	F-7
D104	F-7
D107	C-9
D108	C-9
D110	B-9
D111	C-9
D112	E-7
D601	H-11
D603	I-12
D604	I-11
D605	I-11
D606	I-11
D607	H-10
D701	D-4
D801	J-2
D802	H-2
D803	F-3
D804	F-3
D805	C-2
D806	C-2
IC101	C-9
IC102	F-9
IC103	G-9
IC104	G-8
IC105	H-9
IC106	G-7
IC107	E-6
IC108	F-6
IC109	H-7
IC110	H-6
IC111	G-9
IC112	E-8
IC601	G-12
IC602	G-12
IC603	G-11
IC604	H-11
IC605	C-12
IC606	C-11
IC608	B-10
IC609	B-12
IC701	C-2
IC702	C-3
IC703	C-7
IC704	C-4
IC705	E-5
IC706	B-5
IC801	G-2
IC802	H-3
IC803	D-2
IC804	J-10
IC805	J-11
IC806	I-9
IC807	E-2
IC808	G-2
IC809	F-5
IC810	G-3
IC811	F-5
IC812	F-3
IC813	B-2
IC814	B-3
Q101	B-9
Q102	B-9
Q103	B-9
Q104	B-9
Q105	B-9
Q106	D-9
Q107	D-9
Q108	D-9
Q109	D-9
Q110	F-8
Q111	F-8
Q112	E-5
Q113	H-5
Q114	H-5
Q115	H-5
Q116	H-5
Q117	H-5
Q119	E-6
Q120	E-7
Q121	E-7
Q122	G-5
Q123	F-7
Q124	G-6
Q125	H-5
Q126	E-10
Q127	E-9
Q128	C-9
Q129	E-8

Q130	B-5
Q601	E-11
Q602	H-11
Q603	H-11
Q604	I-11
Q605	I-10
Q606	I-11
Q607	I-11
Q701	B-8
Q701	B-7
Q702	B-7
Q703	B-7
Q704	C-6
Q705	C-6
Q706	B-7
Q707	B-6
Q708	C-5
Q709	D-3
Q710	D-3
Q711	D-3
Q712	D-6
Q713	D-5
Q714	C-5
Q715	B-4
Q716	A-5
Q718	E-5
Q719	E-2
Q720	E-3
Q801	G-3
Q802	H-1
Q803	J-2
Q804	J-2
Q805	J-2
Q806	J-3
Q807	J-3
Q808	J-3
Q809	J-3
Q810	J-4
Q811	J-4
Q812	J-5
Q813	J-5
Q814	J-5
Q815	J-6
Q816	J-6
Q817	J-6
Q818	J-7
Q819	J-7
Q820	J-7
Q821	I-2
Q822	I-2
Q823	I-2
Q824	I-2
Q825	I-3
Q826	I-3
Q827	I-3
Q828	I-4
Q829	I-4
Q840	I-4
Q841	I-5
Q842	I-5
Q843	I-5
Q844	I-6
Q845	I-6
Q846	I-6
Q847	I-7
Q848	I-7
Q849	F-3

CA-16 BOARD



CA-16 (BACK COLOR/AUDIO) PRINTED WIRING BOARD
—Ref. No. CA-16 BOARD: 3000 series—



CA-16 BOARD

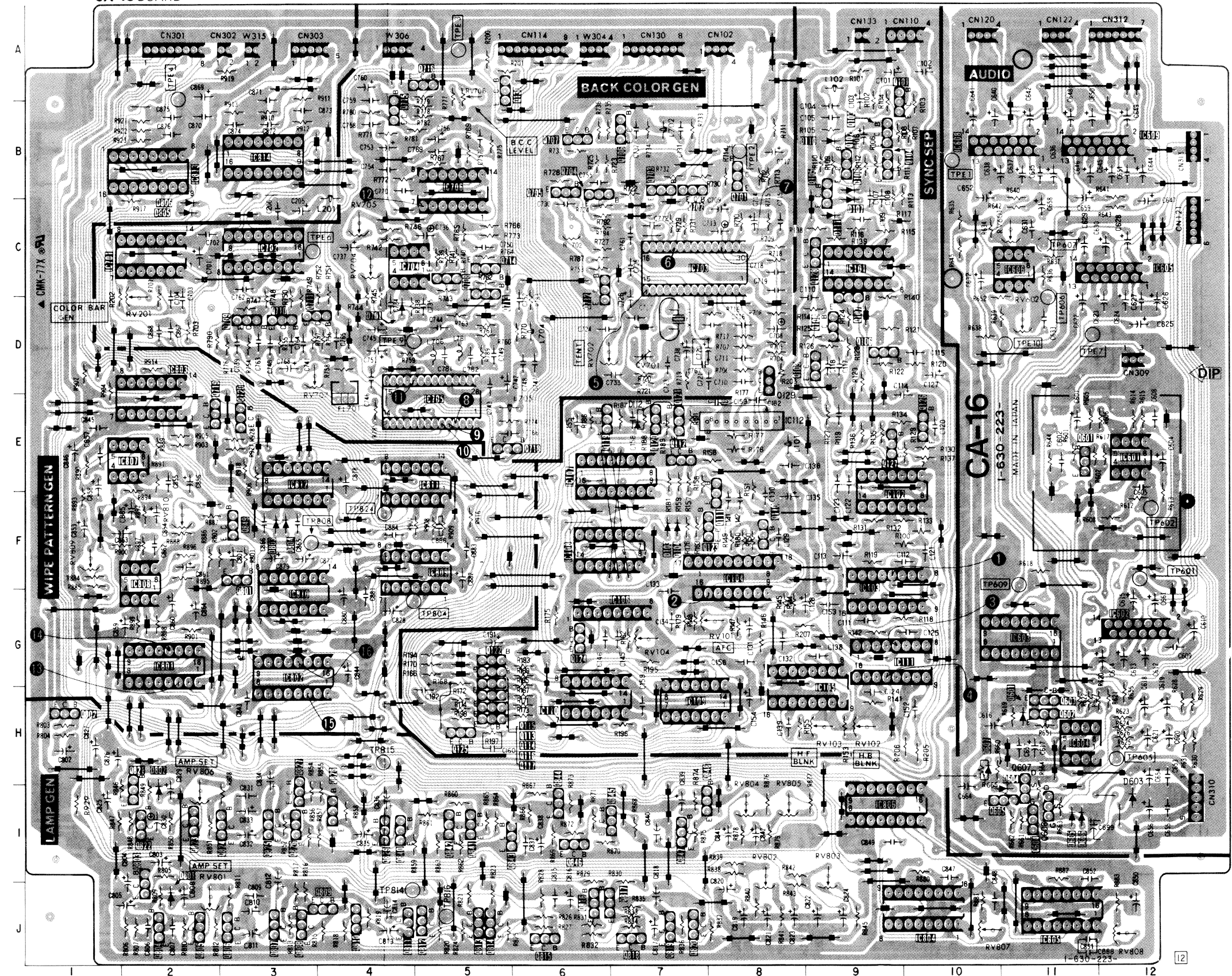
D103 F-7
D104 F-7
D107 C-9
D108 C-9
D110 B-9
D111 C-9
D112 E-7
D601 H-11
D603 I-12
D604 I-11
D605 I-11
D606 I-11
D607 H-10
D701 D-4
D801 J-2
D802 H-2
D803 F-3
D804 F-3
D805 C-2
D806 C-2

IC101 C-9
IC102 F-9
IC103 G-9
IC104 G-8
IC105 H-9
IC106 G-7
IC107 E-6
IC108 F-6
IC109 H-7
IC110 H-6
IC111 G-9
IC112 E-8
IC601 G-12
IC602 G-12
IC603 G-11
IC604 H-11
IC605 C-12
IC606 C-11
IC608 B-10
IC609 B-12
IC701 C-2
IC702 C-3
IC703 C-7
IC704 C-4
IC705 E-5
IC706 B-5
IC801 G-2
IC802 H-3
IC803 D-2
IC804 J-10
IC805 J-11
IC806 I-9
IC807 E-2
IC808 G-2
IC809 F-5
IC810 G-3
IC811 F-5
IC812 F-3
IC813 B-2
IC814 B-3

Q101 B-9
Q102 B-9
Q103 B-9
Q104 B-9
Q105 B-9
Q106 D-9
Q107 D-9
Q108 D-9
Q109 D-9
Q110 F-8
Q111 F-8
Q112 E-5
Q113 H-5
Q114 H-5
Q115 H-5
Q116 H-5
Q117 H-5
Q119 E-6
Q120 E-7
Q121 E-7
Q122 G-5
Q123 F-7
Q124 G-6
Q125 H-5
Q126 E-10
Q127 E-9
Q128 C-9
Q129 E-8

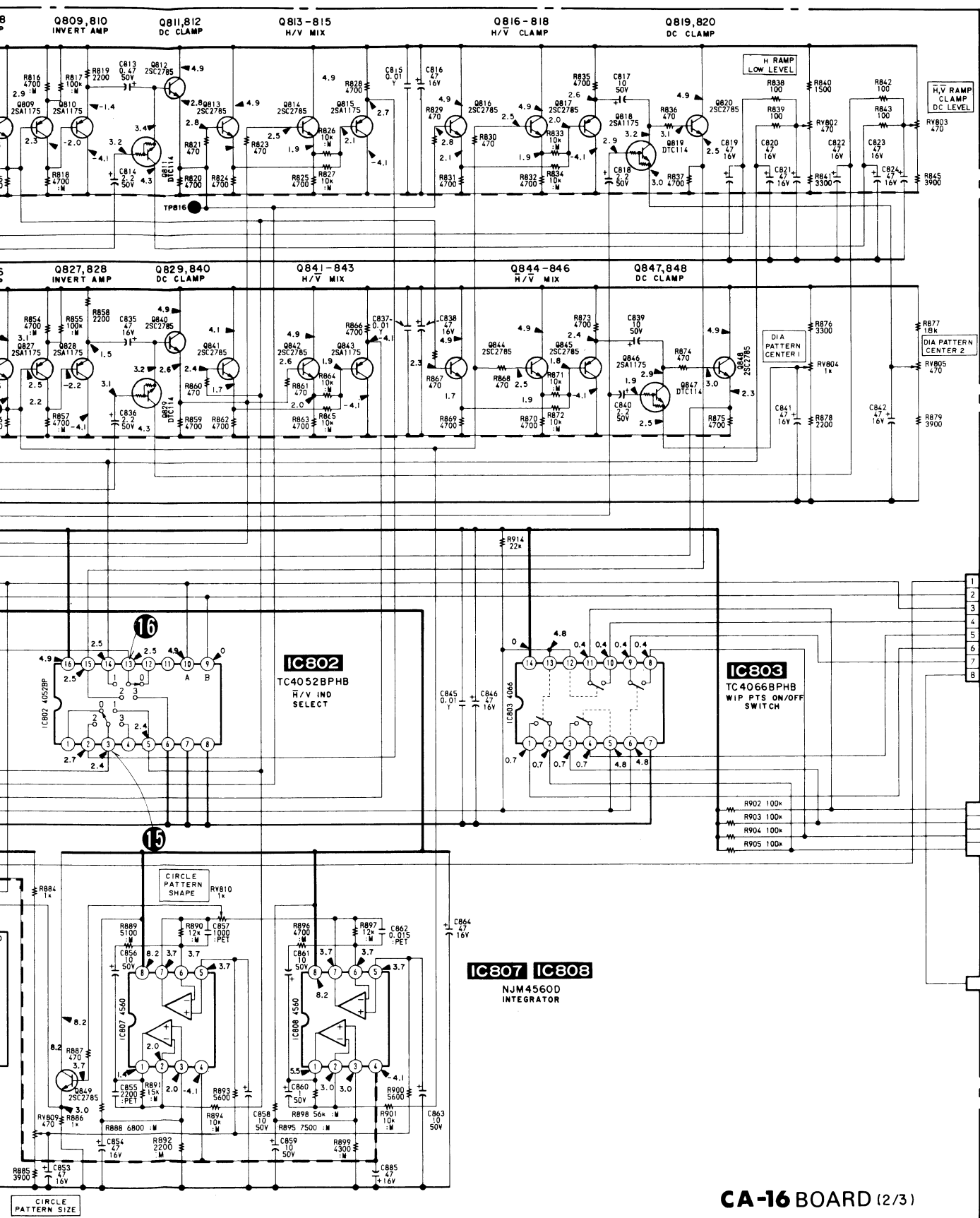
Q130 B-5
Q601 E-11
Q602 H-11
Q603 H-11
Q604 I-11
Q605 I-10
Q606 I-11
Q607 I-11
Q701 B-8
Q701 B-7
Q702 B-7
Q703 B-7
Q704 C-6
Q705 C-6
Q706 B-7
Q707 B-6
Q708 C-5
Q709 D-3
Q710 D-3
Q711 D-3
Q712 D-6
Q713 D-5
Q714 C-5
Q715 B-4
Q716 A-5
Q718 E-5
Q719 E-2
Q720 E-3
Q801 G-3
Q802 H-1
Q803 J-2
Q804 J-2
Q805 J-2
Q806 J-3
Q807 J-3
Q808 J-3
Q809 J-3
Q810 J-4
Q811 J-4
Q812 J-5
Q813 J-5
Q814 J-5
Q815 J-6
Q816 J-6
Q817 J-6
Q818 J-7
Q819 J-7
Q820 J-7
Q821 I-2
Q822 I-2
Q823 I-2
Q824 I-2
Q825 I-3
Q826 I-3
Q827 I-3
Q828 I-4
Q829 I-4
Q840 I-4
Q841 I-5
Q842 I-5
Q843 I-5
Q844 I-6
Q845 I-6
Q846 I-6
Q847 I-7
Q848 I-7
Q849 F-3

CA-16 BOARD



—Ref. No. CA-16 BOARD: 3000 series—





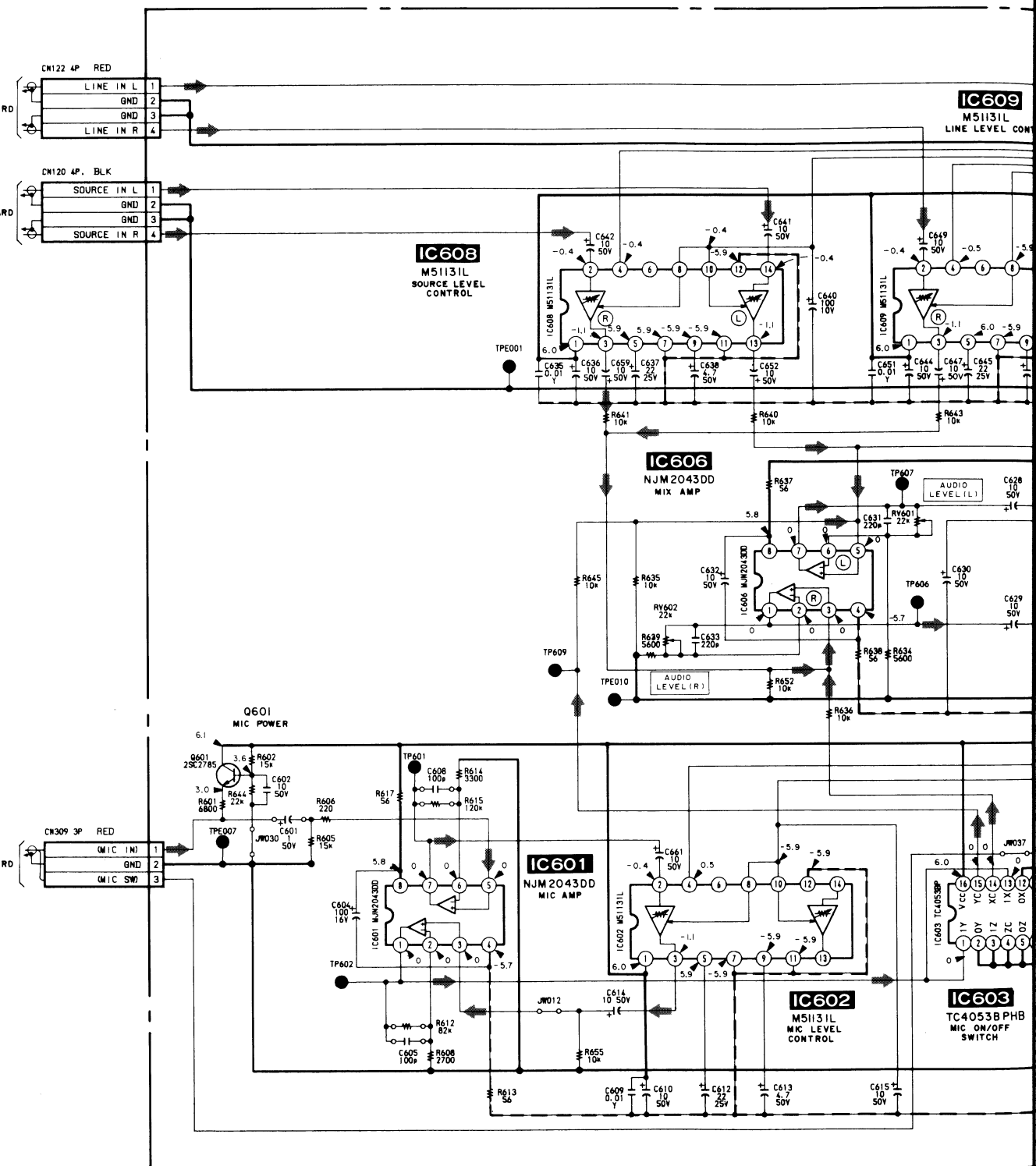
(See page 72.)

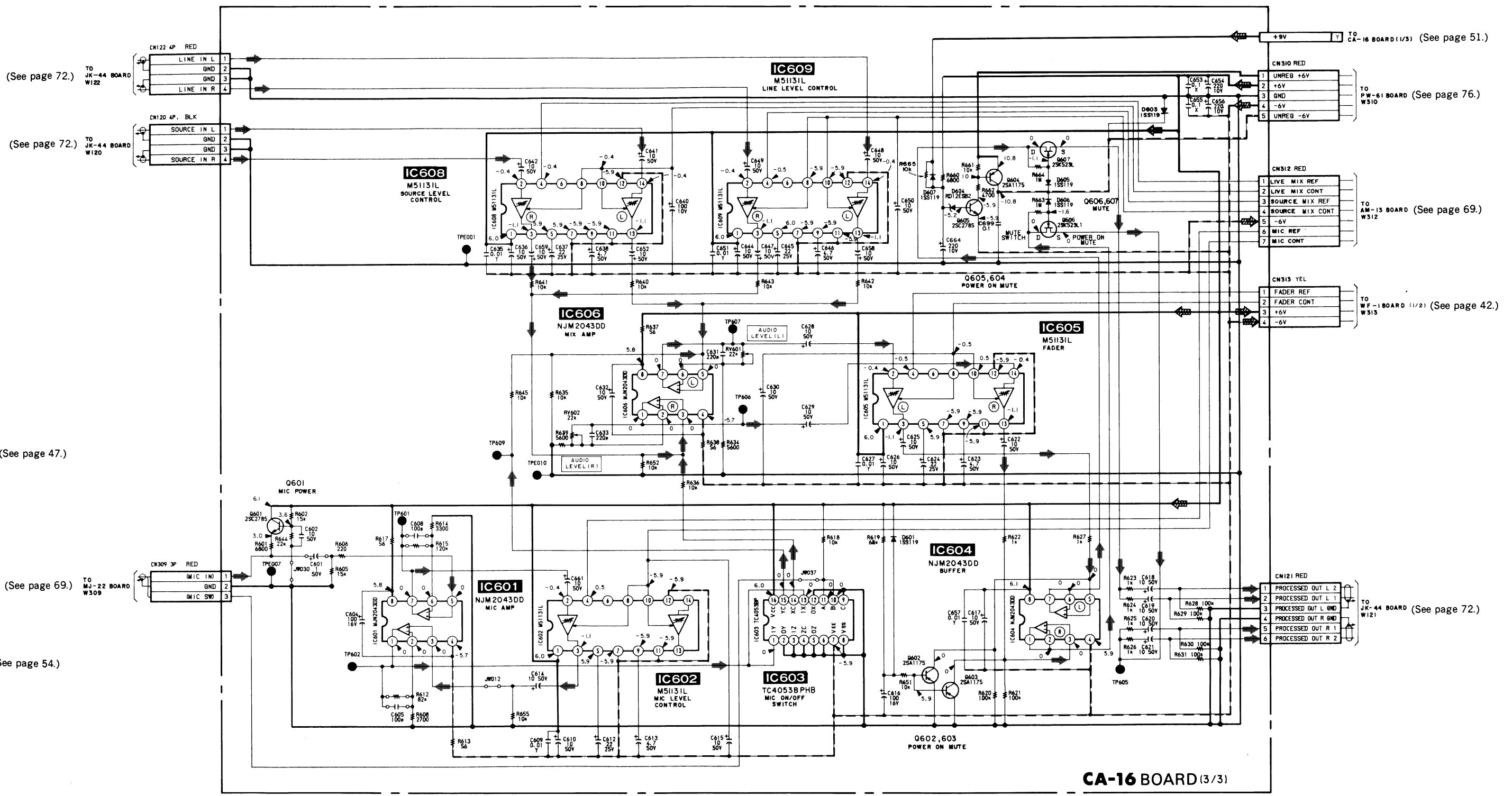
(See page 72.)

(See page 47.)

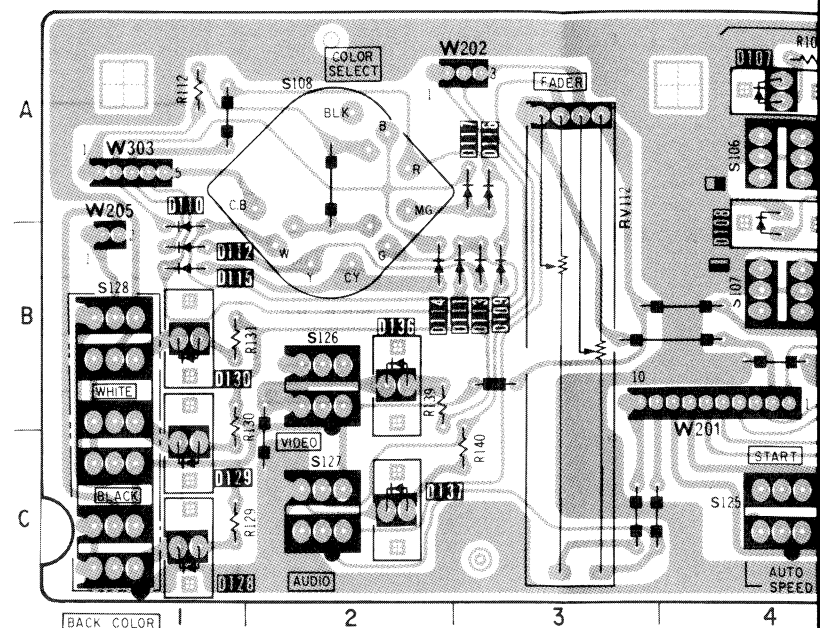
(See page 69.)

TO CA-16 BOARD(1/3) (See page 54.)

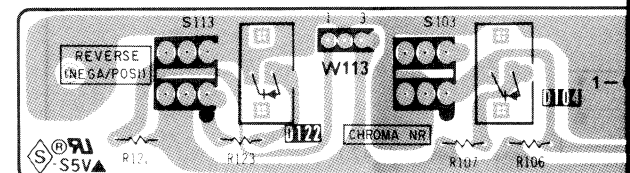
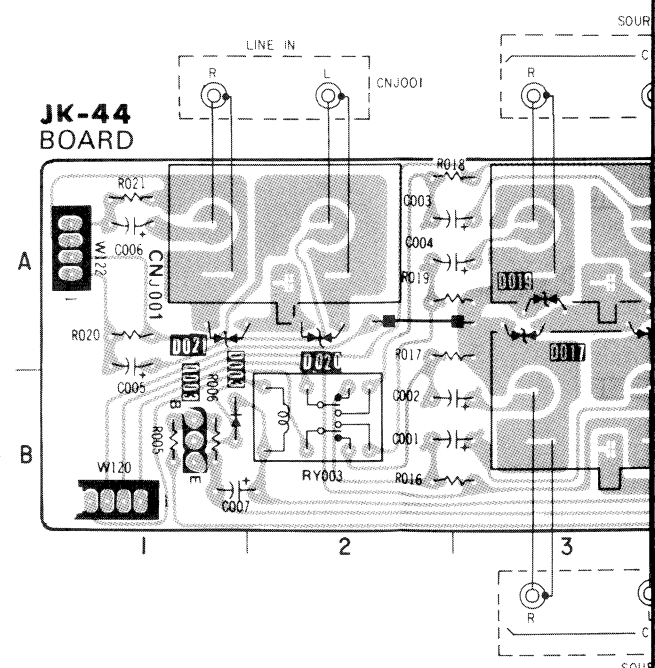




FT-39 BOARD



FT-38 BOARD

JK-44
BOARD

JK-44 BOARD

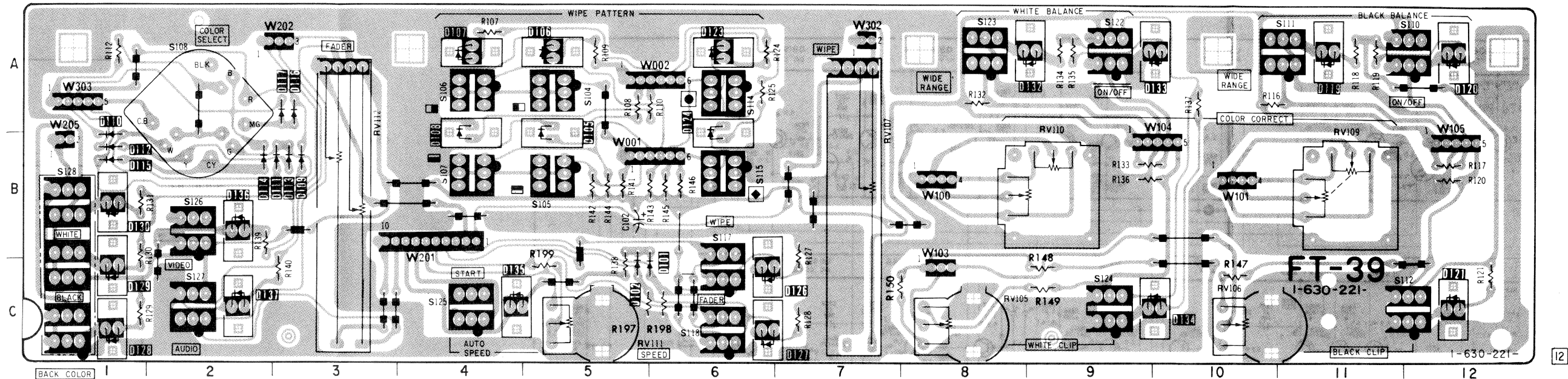
D001	A-6
D102	B-6
D103	A-1
D116	A-3
D017	A-3
D018	A-4
D019	A-3
D020	A-2
D021	A-1
D024	A-8
D025	A-8
D026	A-8
D027	A-8
D801	B-8
D802	B-8
D803	A-8
D804	A-8
Q001	A-6
Q002	B-6

FT-39 (FUNCTION SW), FT-38 (VIDEO SW), JK-44 (VIDEO S TERMINAL), AM-13 (COLOR/AUDIO VR), IS-5 (EXT VIDEO INPUT), MJ-22 (LINE 2 INPUT)
 —Ref. No. FT-39 and JK-44 BOARDS: 4000 series, FT-38 and IS-5 BOARDS: 5000 series, AM-13 BOARD: 6000 series, MJ-22 BOARD: 7000 series—

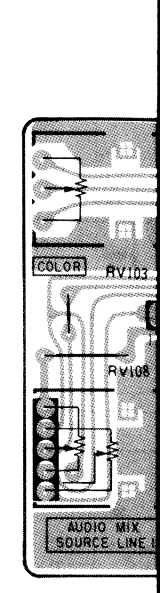
FT-39 BOARD

- | | |
|------|------|
| D101 | C-5 |
| D102 | C-5 |
| D105 | B-5 |
| D106 | A-5 |
| D107 | A-4 |
| D108 | B-5 |
| D109 | B-3 |
| D110 | B-1 |
| D111 | B-2 |
| D112 | B-1 |
| D113 | B-3 |
| D114 | B-2 |
| D115 | B-1 |
| D116 | A-3 |
| D117 | A-3 |
| D119 | A-11 |
| D120 | A-12 |
| D121 | C-12 |
| D123 | A-6 |
| D124 | B-6 |
| D126 | C-6 |
| D127 | C-6 |
| D128 | C-1 |
| D129 | C-1 |
| D130 | C-1 |
| D132 | A-9 |
| D133 | A-10 |
| D134 | C-10 |
| D135 | C-4 |
| D136 | B-2 |
| D137 | C-2 |

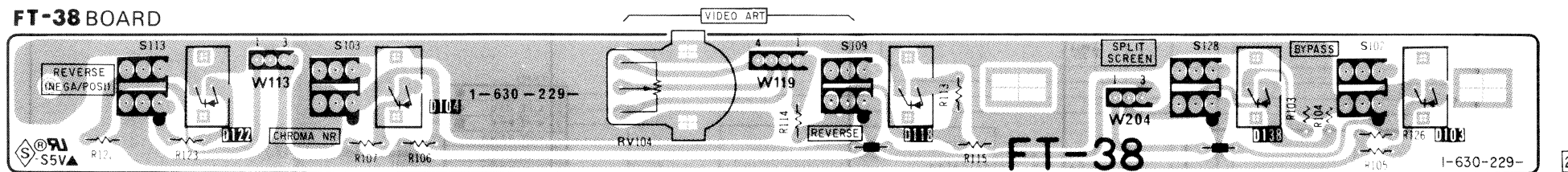
FT-39 BOARD



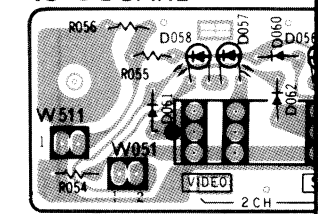
AM-13 BOARD



FT-38 BOARD



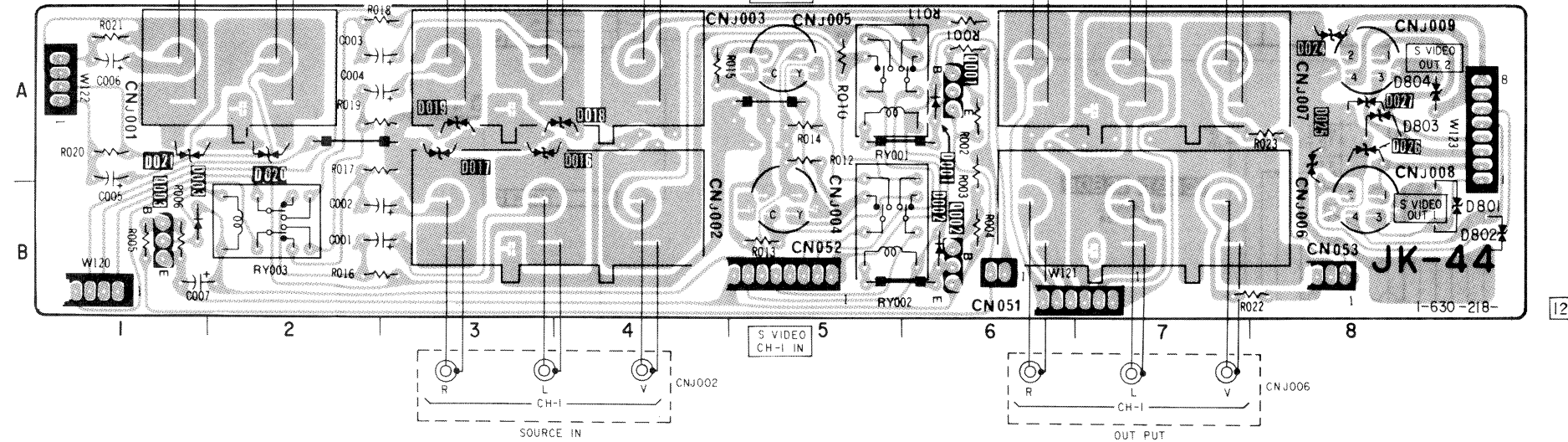
IS-5 BOARD



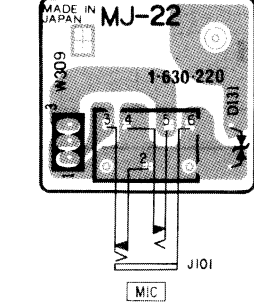
JK-44 BOARD

- | | |
|------|-----|
| D001 | A-6 |
| D102 | B-6 |
| D103 | A-1 |
| D116 | A-3 |
| D017 | A-3 |
| D018 | A-4 |
| D019 | A-3 |
| D020 | A-2 |
| D021 | A-1 |
| D024 | A-8 |
| D025 | A-8 |
| D026 | A-8 |
| D027 | A-8 |
| D801 | B-8 |
| D802 | B-8 |
| D803 | A-8 |
| D804 | A-8 |
| Q001 | A-6 |
| Q002 | B-6 |

JK-44 BOARD

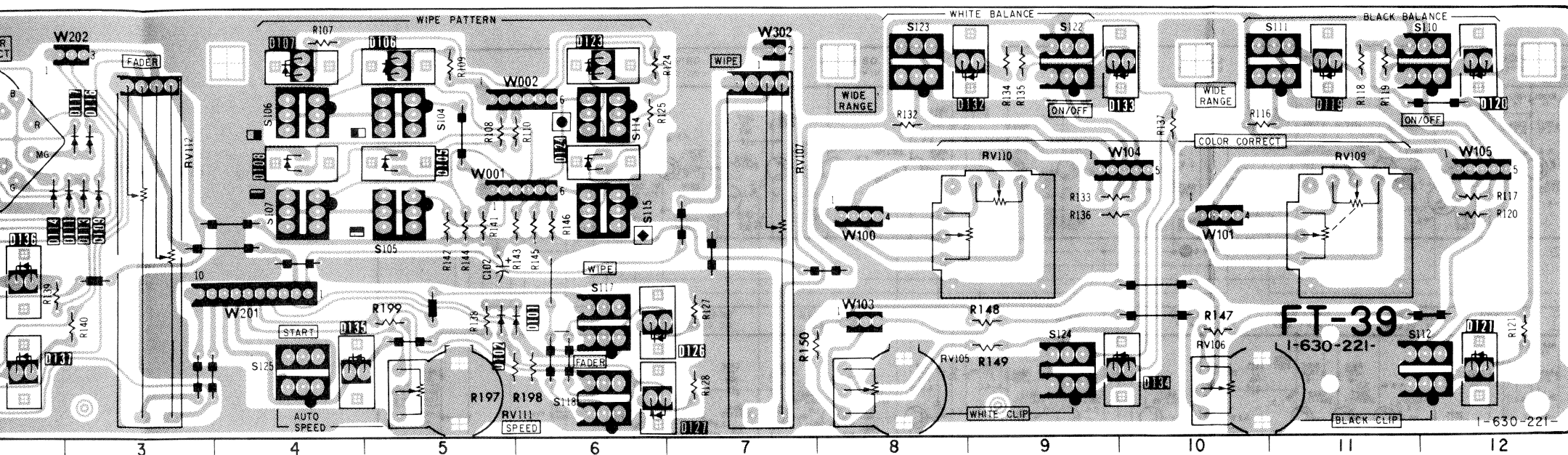


MJ-22 BOARD

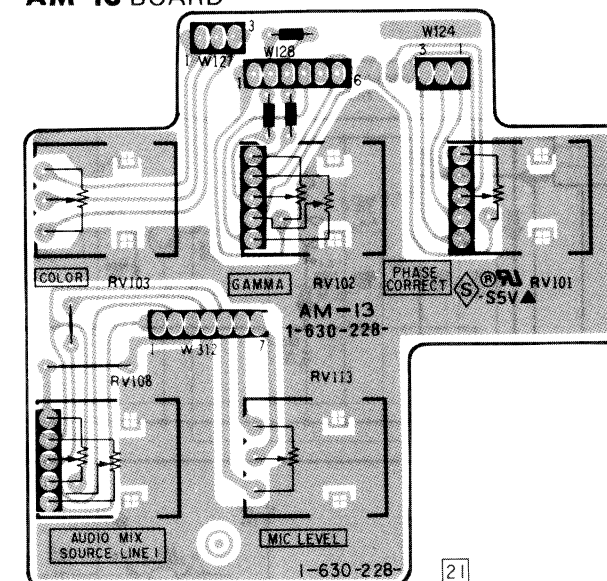


38 (VIDEO SW), JK-44 (VIDEO S TERMINAL), AM-13 (COLOR/AUDIO VR), IS-5 (EXT VIDEO INPUT), MJ-22 (LINE 2 INPUT)

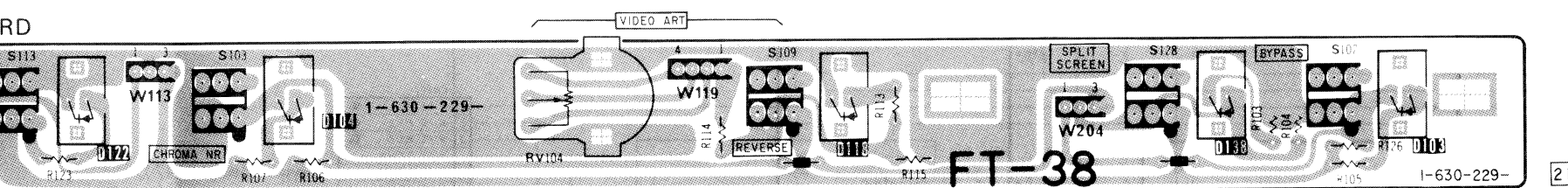
BOARDS: 4000 series, FT-38 and IS-5 BOARDS: 5000 series, AM-13 BOARD: 6000 series, MJ-22 BOARD: 7000 series—



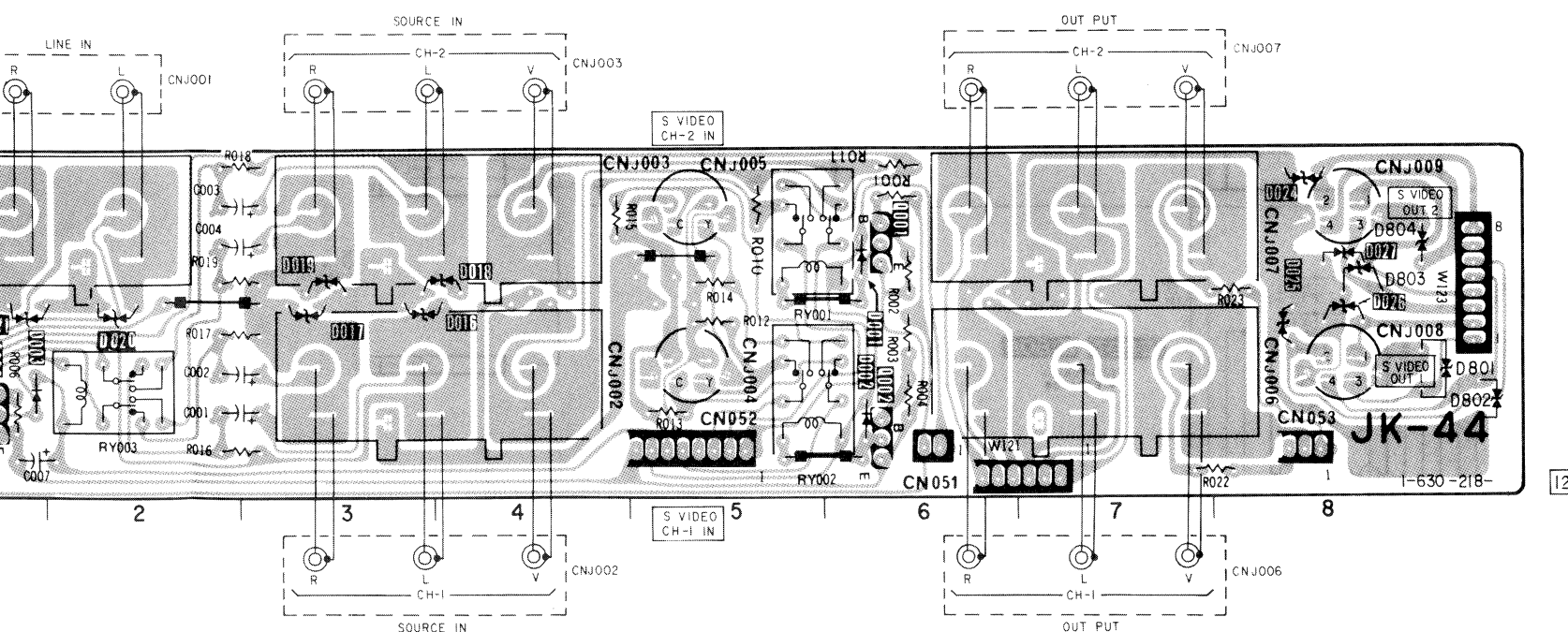
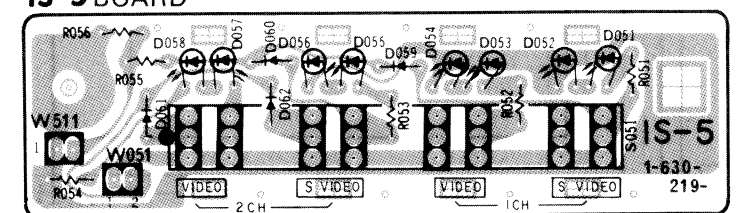
AM-13 BOARD



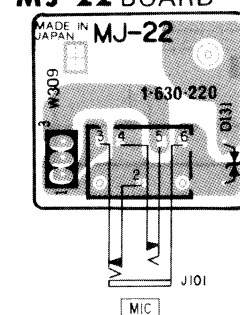
RD

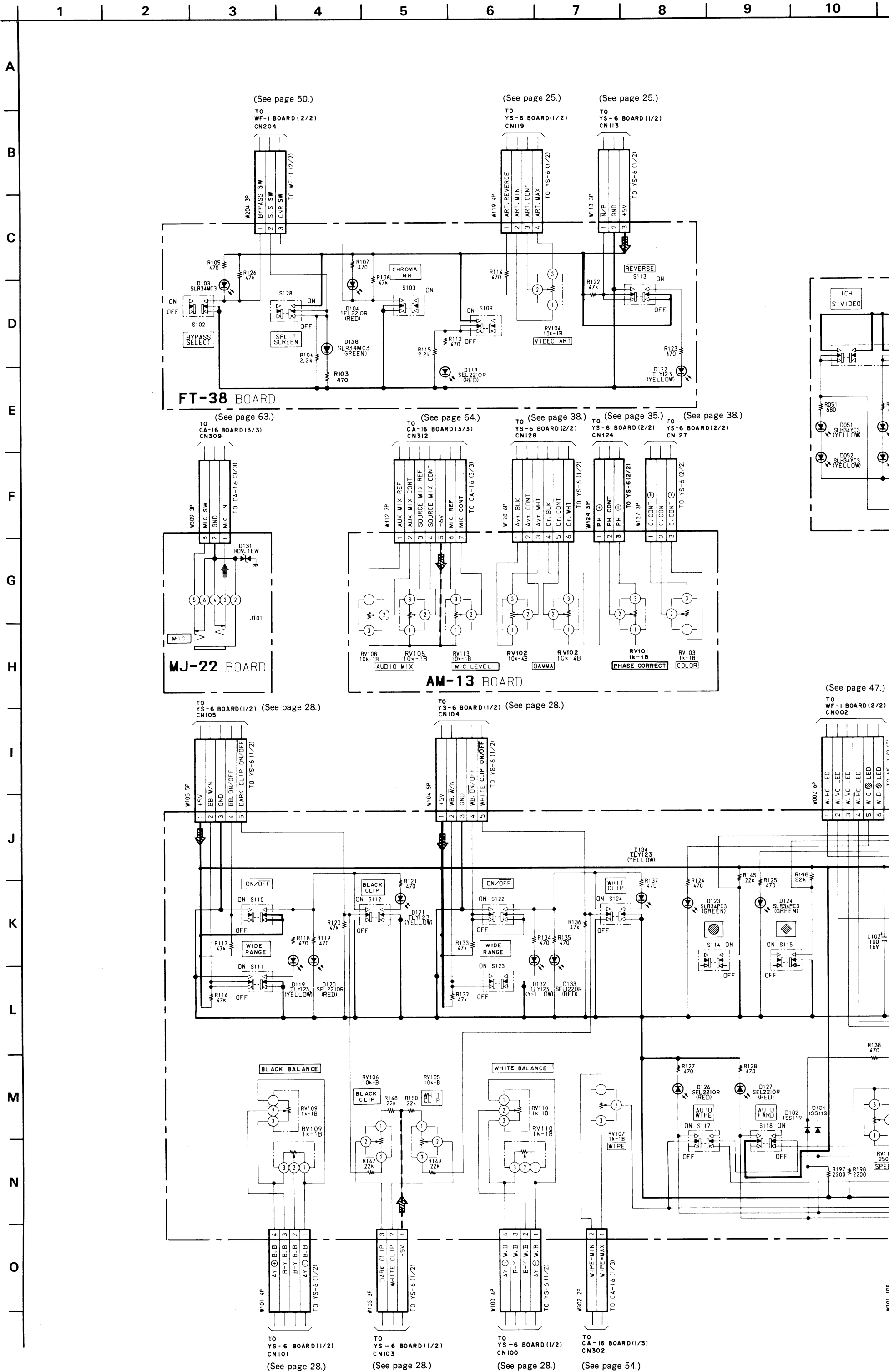


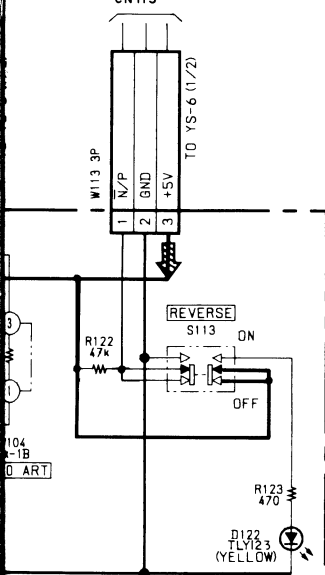
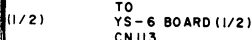
IS-5 BOARD



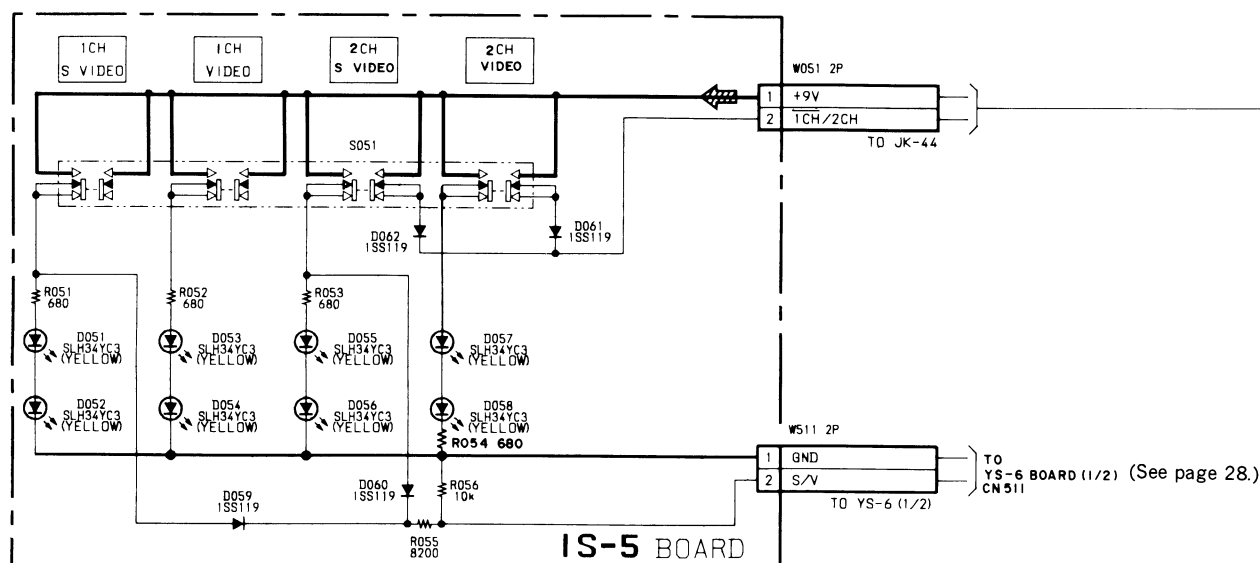
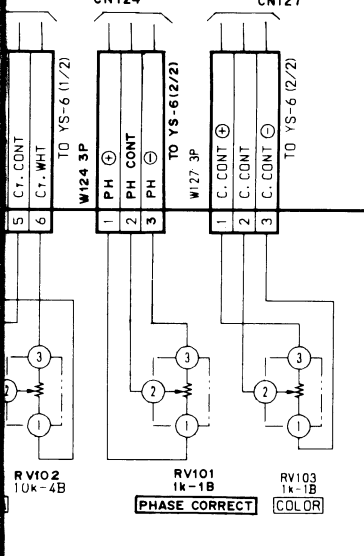
MJ-22 BOARD





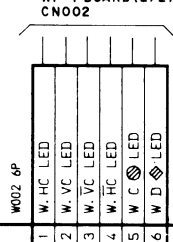


2D (2/2)	YS-6 BOARD (2/2) CN124	YS-6 BOARD (2/2) CN127
----------	---------------------------	---------------------------

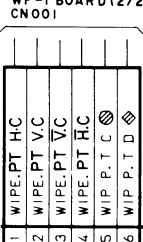


8.

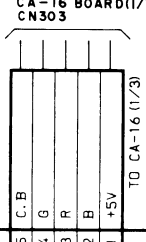
TO
WF-1 BOARD(2/2)



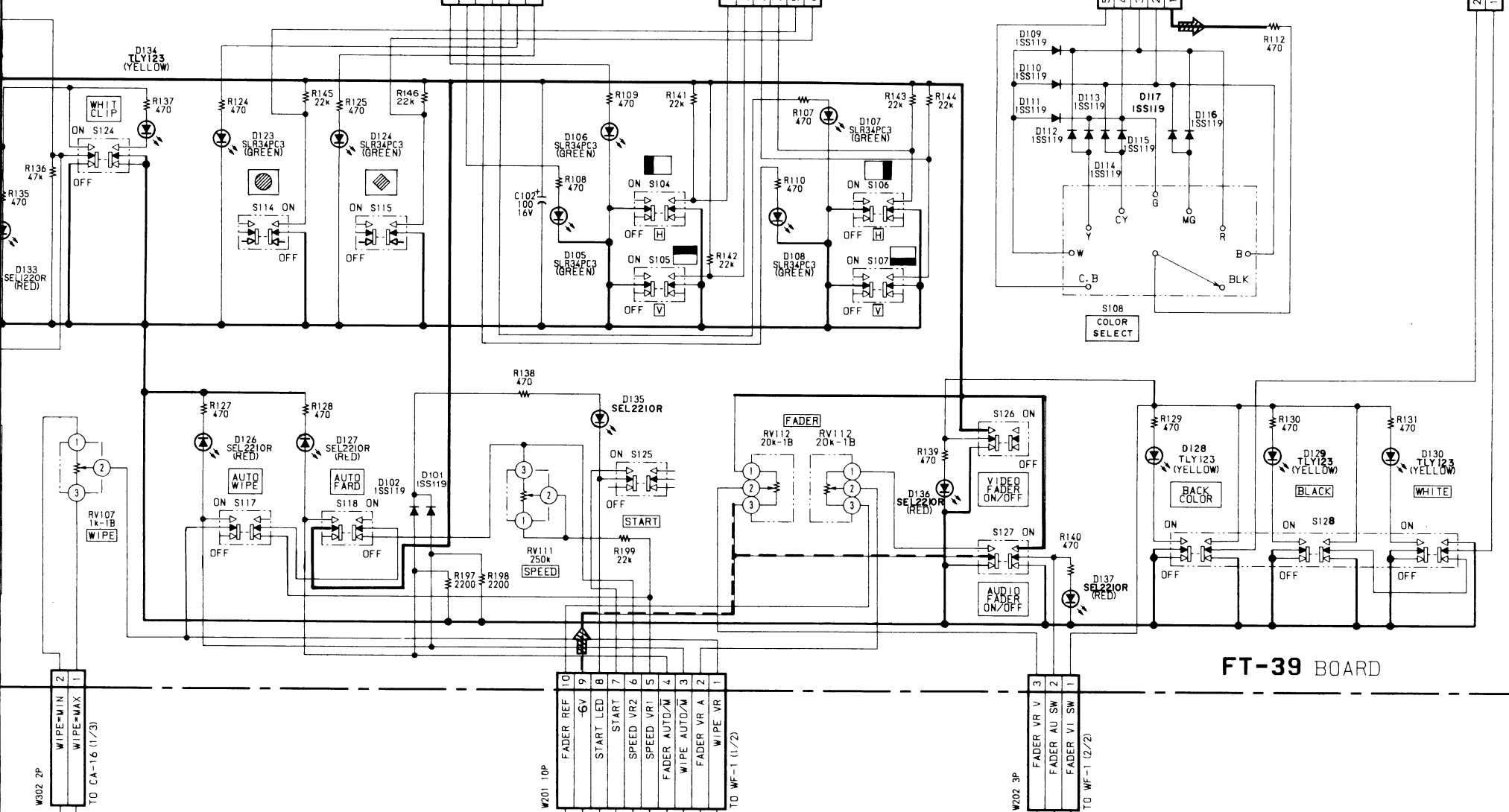
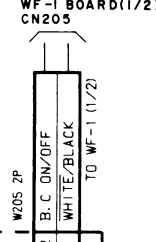
TO
WE-1 BOARD (2/2)



TO
CA. 16 BOARDING



TO _____



CN302

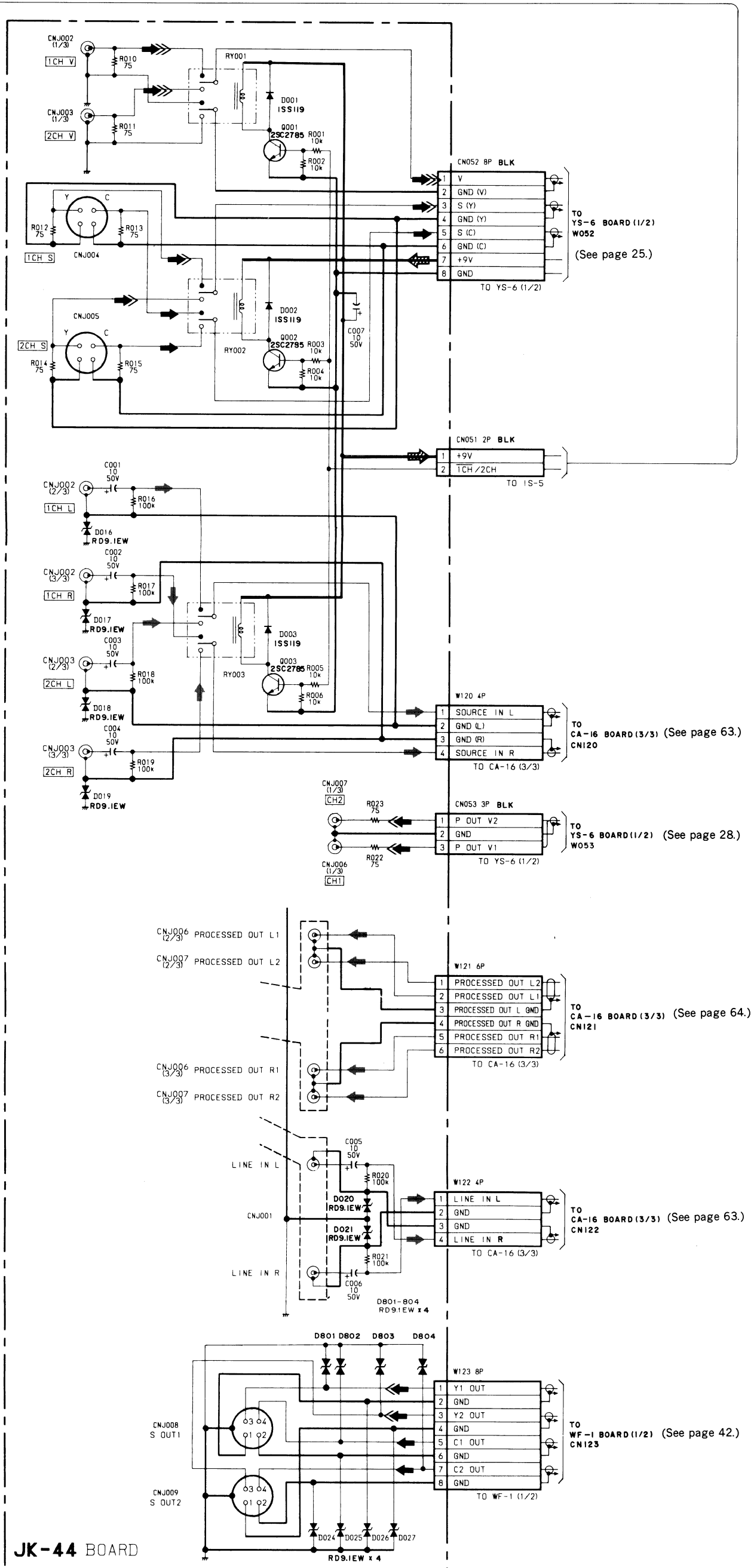
(See page 54.)

WF-1 BOARD (1/2)
CN201
(See page 10)

(See page 42.)

WF-1 BOARD(2/2)
CN202

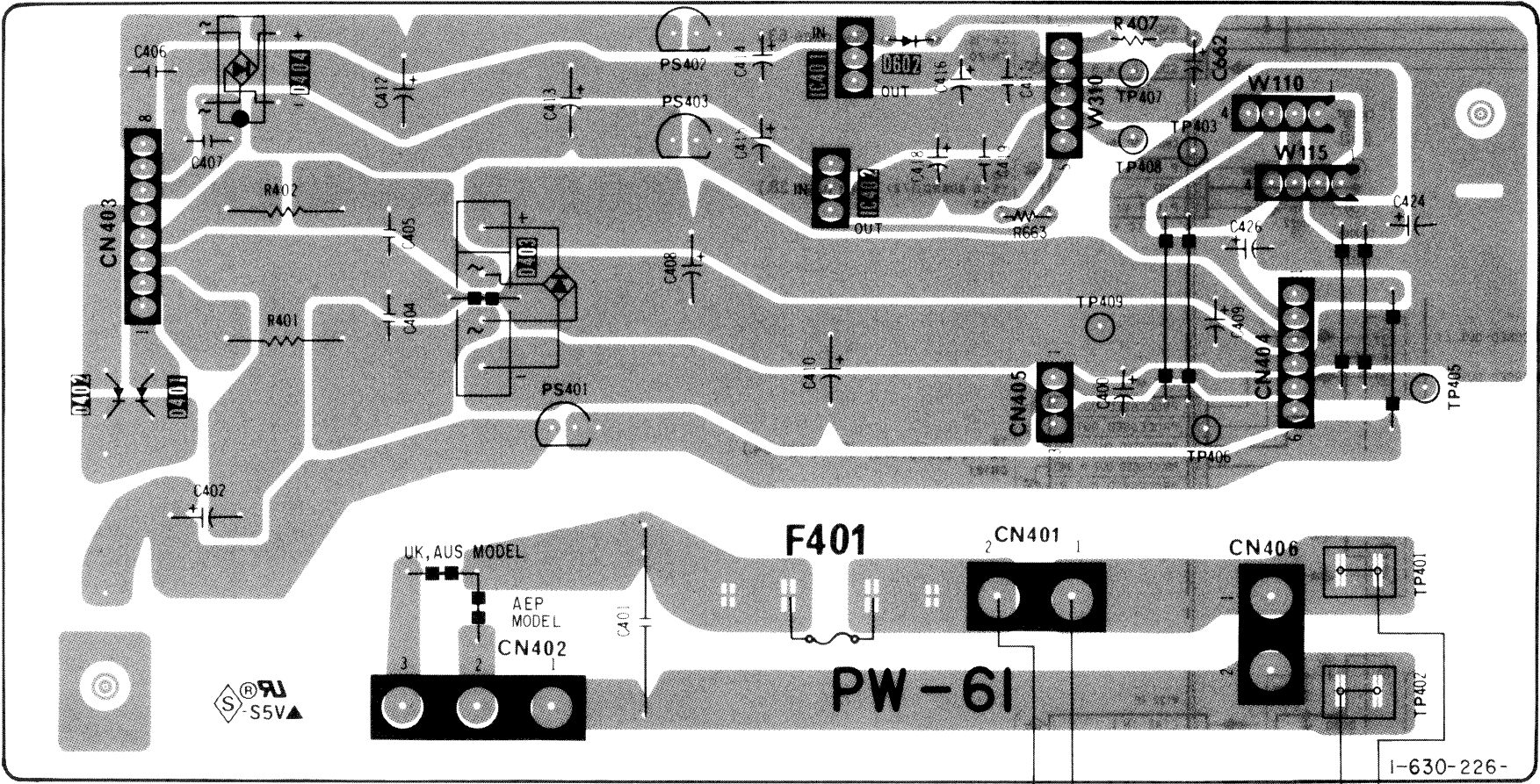
(See page 50.)



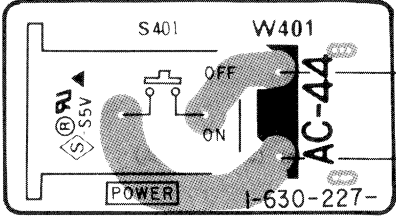
- **Signal path**
 - ➡➡ : REC Y Signal
 - ➡ : REC CHROMA Signal
 - ➡➡➡ : REC Y/CHROMA Signal
 - ➡➡ : REC AUDIO Signal

AC-44 (POWER SW), PT-68 (DC/DC CONVERTER), PT-70 (DC/DC CONVERTER), PW-61 (POWER SUPPLY) PRINTED WIRING BOARD
—Ref. No. PT-68BOARD: 4000 series, AC-44 BOARD: 5000 series, PW-61 BOARD: 6000 series, PT-70 BOARD: 7000 series—

PW-61 BOARD



AC-44 BOARD



—74—

[illegible]

1

J

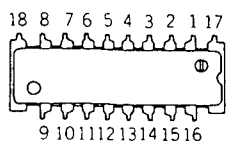
—75—

PT-68BOARD: 4000 series, AC-44 BOARD: 5000 series, PW-61 BOARD: 6000 series, PT-70 BOARD: 7000 series—



4-3. SEMICONDUCTORS

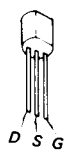
HA1141



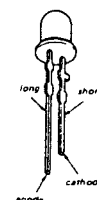
**DTA114ES
DTC114ES
DTC143TS
2SA1048
2SC2458**



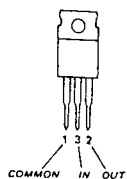
2SK523



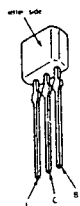
SLH-34YC3



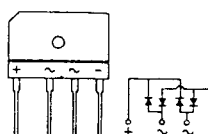
**M5F78M09
M5F7805
NJM79M05FA
NJM79M06FA
NJM7905FA
RC78M06FA**



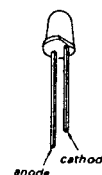
2SC2785-HFE



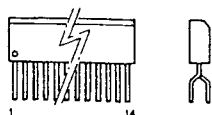
D2SB20



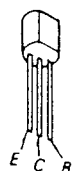
SLR-34MC3



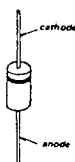
M51131L



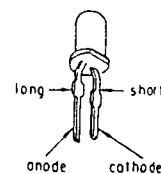
2SA733-K



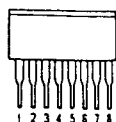
**RD3.9E-B2
RD9.1E-B2**



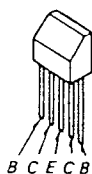
**SLR-34PC3
SEL2210R
TLY123**



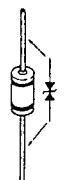
M51848L



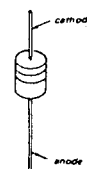
**2SA979
2SC2259-F**



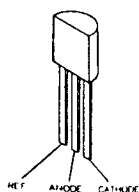
RD9.1EW



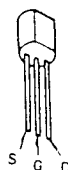
**1SS119
1SS148
11ES2**



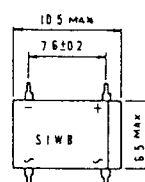
TL431CLPB



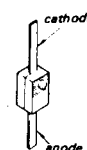
2SK105A-10



S1WB60



1T25



SECTION 5 EXPLODED VIEWS

NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

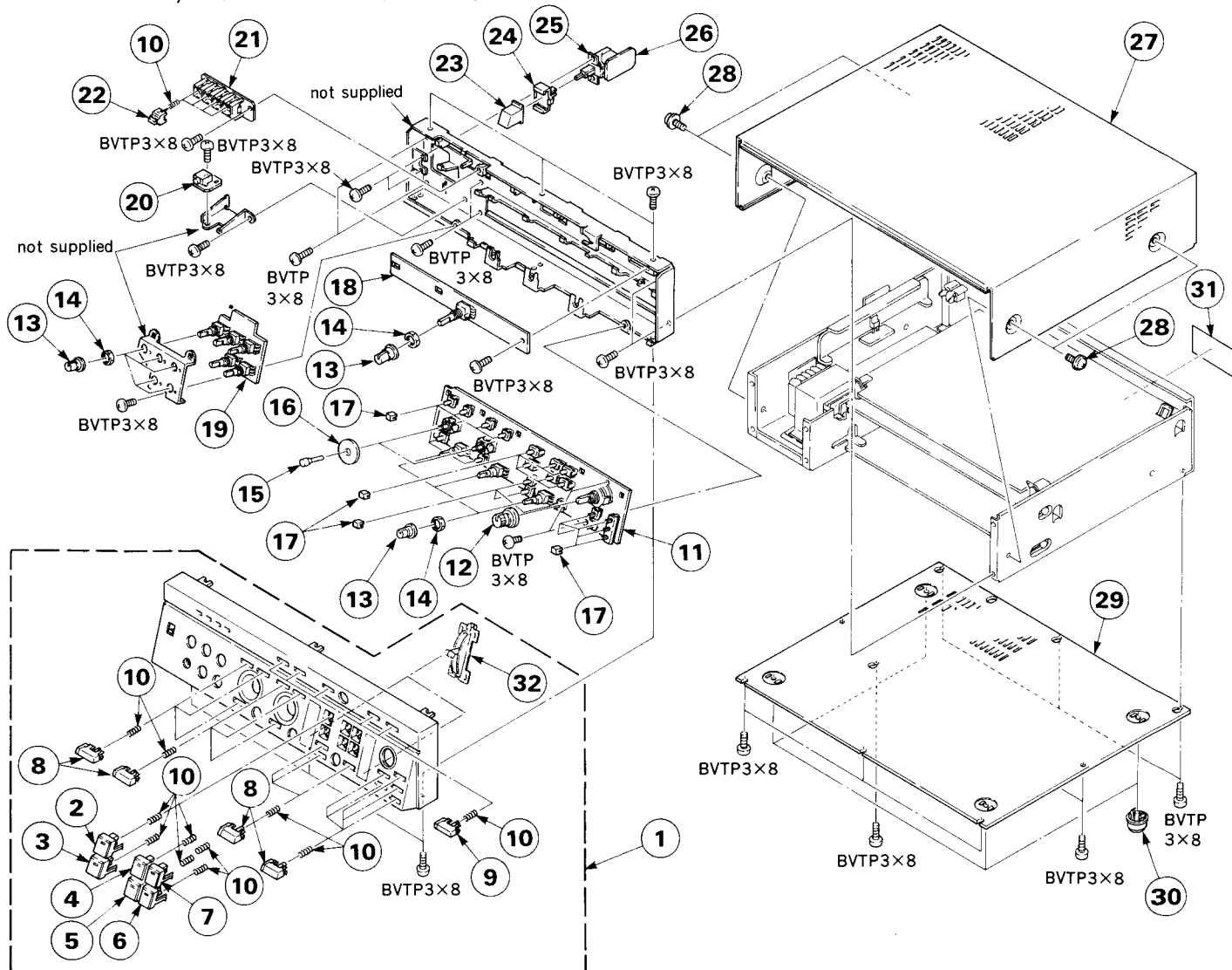
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts Example:
(RED) ... KNOB, BALANCE (WHITE)

↑
Cabinet's Color

↑
Parts' Color

The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

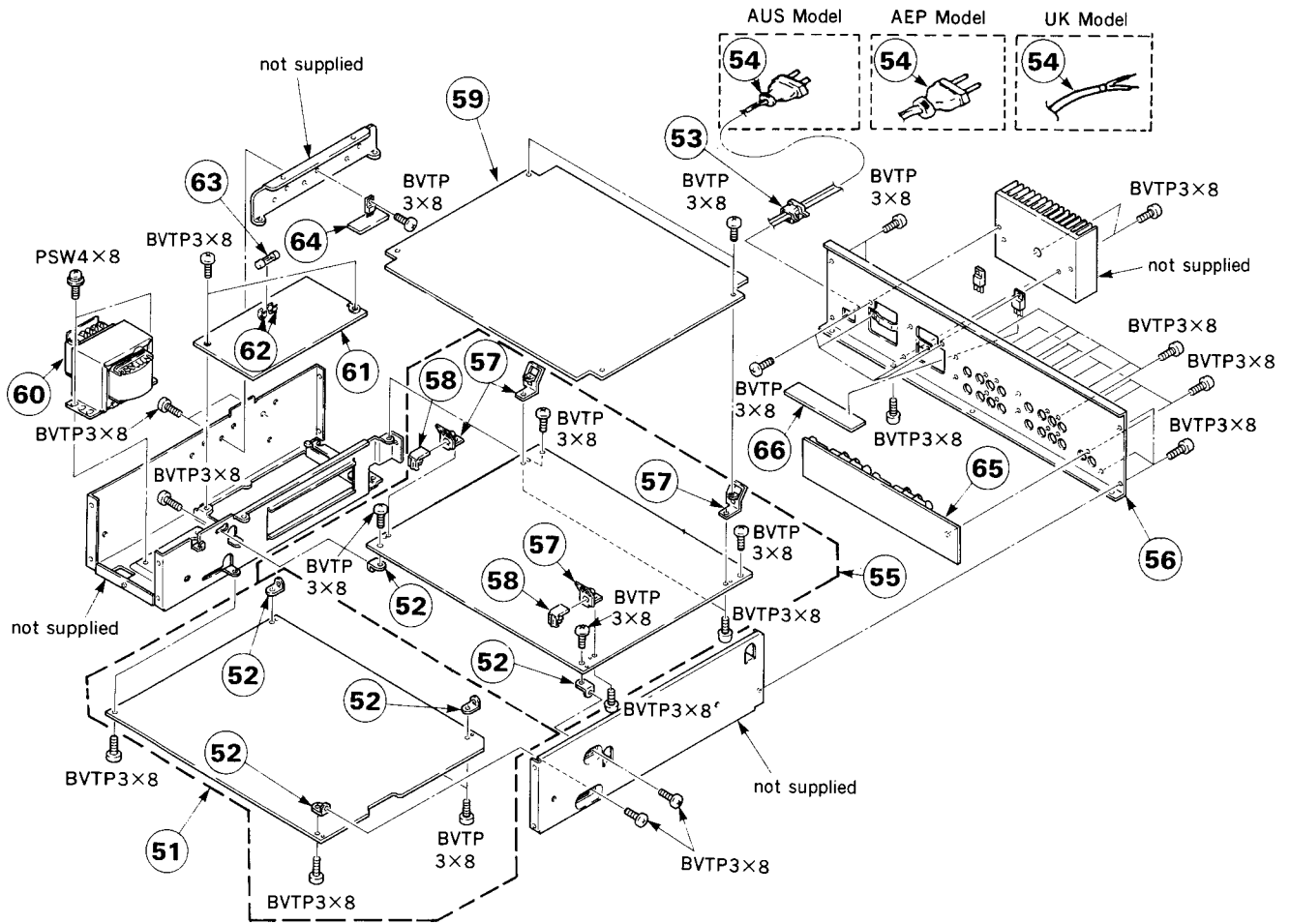
5-1. CABINET, FRONT PANEL ASSEMBLIES



No.	Part No.	Description	Remark
1	X-2118-237-1	PANEL ASSY, FRONT	2-10, 32
2	X-2118-230-1	PUSH BUTTON (C) ASSY	
3	X-2118-229-1	PUSH BUTTON (D) ASSY	
4	X-2118-208-1	PUSH BUTTON (S-0) ASSY	
5	X-2118-210-1	PUSH BUTTON (S-2) ASSY	
6	X-2118-211-1	PUSH BUTTON (S-3) ASSY	
7	X-2118-209-1	PUSH BUTTON (S-1) ASSY	
8	X-2118-205-1	PUSH BUTTON (SL) ASSY	
9	X-2118-204-1	PUSH BUTTON (FL) ASSY	
10	2-217-533-00	SPRING, COMPRESSION	
11	*A-7070-849-A	FT-39 BOARD, COMPLETE	
12	X-2118-214-1	KNOB (L) ASSY, VOL	
13	X-2118-215-1	KNOB (S) ASSY, VOL	
14	2-118-268-01	NUT (M9), HEXAGON	
15	2-128-426-01	GRIP	
16	2-118-243-11	SHEET, JOY STICK	
17	2-118-220-01	JOINT	

No.	Part No.	Description	Remark
18	*1-630-229-21	FT-38 BOARD	
19	*1-630-228-21	AM-13 BOARD	
20	*1-630-220-12	MJ-22 BOARD	
21	*1-630-219-12	IS-5 BOARD	
22	X-2118-231-1	BUTTON (I-S) ASSY	
23	2-118-215-01	BUTTON (POWER)	
24	2-118-218-01	JOINTER	
25	▲1-553-318-13	SWITCH, PUSH (AC POWER) (1 KEY) (S401)	
26	*1-630-227-21	AC-44 BOARD	
27	2-382-698-01	CASE, UPPER	
28	4-847-802-00	SCREW, CASE	
29	*2-382-694-01	PLATE, BOTTOM	
30	X-3701-069-0	FOOT ASSY, M.F	
31	*2-128-447-01	LABEL, MODEL NUMBER (UK/AUS MODEL)	
	*2-128-448-01	LABEL, MODEL NUMBER (AEP MODEL)	
32	X-2118-236-1	LEVER ASSY, FADER	

5-2. MAIN BOARD ASSEMBLY



Note: The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

No.	Part No.	Description	Remark	No.	Part No.	Description	Remark
51	*A-7061-748-A	YS-6 BOARD, COMPLETE		59	*A-7061-750-A	CA-16 BOARD, COMPLETE	
52	*2-382-687-11	HOLDER (2), PC BOARD		60	 .1-449-826-11	TRANSFORMER, POWER	
53	 .3-703-244-02	BUSHING (2104), CORD		61	*A-7061-751-A	PW-61 BOARD, COMPLETE (AEP MODEL)	62
54	 .1-534-817-31	CORD, POWER (AEP MODEL)			*A-7061-835-A	PW-61 BOARD, COMPLETE (UK/AUS MODEL)	62
	 .1-551-732-11	CORD, POWER (AUS MODEL)		62	 .1-533-189-11	HOLDER, FUSE	
54	 .1-551-884-32	CORD, POWER (UK MODEL)		63	 .1-532-259-00	FUSE, TIME-LAG	
55	*A-7061-749-A	WF-1 BOARD, COMPLETE	52, 57, 58	64	*1-630-217-12	PT-70 BOARD	
56	2-128-439-21	PLATE, JACK		65	*A-7070-842-A	JK-44 BOARD, COMPLETE	
57	*2-128-437-01	HOLDER (3), PC BOARD		66	*1-630-222-12	PT-68 BOARD	
58	*3-710-565-01	HINGE, PC BOARD					

SECTION 6 ELECTRICAL PARTS LIST

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

CAPACITORS:

MF: μ F, PF: μ F.

RESISTORS

- All resistors are in ohms.
- F: nonflammable

COILS

- MMH: mH, UH: μ H

SEMICONDUCTORS

In each case, U: μ , for example:

UA...: μ A..., UPA...: μ PA...,

UPC...: μ PC, UPD...: μ PD...

The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
	*1-630-217-12	PT-70 BOARD *****				SWITCH	
	7-685-645-79	SCREW +BVTP 3X6 TYPE2 IT-3		S051	1-571-875-11	SWITCH, PYUSH (4 KEY) (INPUT SELECT)	
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3				*****	
		CAPACITOR			*A-7070-849-A	FT-39 BOARD, COMPLETE *****	
C422	1-161-379-00	CERAMIC 0.01MF 30% 16V			*2-118-219-01	HOLDER (S), LED	
C423	1-123-875-11	ELECT 10MF 20% 50V			*3-662-262-00	HOLDER (D), LED	
		IC				CAPACITOR	
IC406	8-759-914-44	IC TL431CLPB		C102	1-126-101-11	ELECT 100MF 20% 16V	
IC407	8-759-701-84	IC NJM7905FA				DIODE	
		IC LINK		D101	8-719-921-20	DIODE 1SS119	
PS404A	1-532-727-11	LINK, IC (ICP-N5) 0.25A		D102	8-719-921-20	DIODE 1SS119	
		RESISTOR		D105	8-719-940-80	DIODE SLR-34PC3 ()	
R405	1-249-423-11	CARBON 3.3K 5% 1/4W		D106	8-719-940-80	DIODE SLR-34PC3 ()	
R406	1-249-429-11	CARBON 10K 5% 1/4W		D107	8-719-940-80	DIODE SLR-34PC3 ()	
		VARIABLE RESISTOR		D108	8-719-940-80	DIODE SLR-34PC3 ()	
RV402	1-228-991-00	RES, ADJ, CARBON 2.2K		D109	8-719-911-19	DIODE 1SS119	
		*****		D110	8-719-911-19	DIODE 1SS119	
	*1-630-219-12	IS-5 BOARD *****		D111	8-719-911-19	DIODE 1SS119	
	*2-128-430-01	HOLDER (I-S), LED		D112	8-719-911-19	DIODE 1SS119	
		DIODE		D113	8-719-911-19	DIODE 1SS119	
D051	8-719-945-57	DIODE SLH-34YC3 (1CH S VIDEO)		D114	8-719-911-19	DIODE 1SS119	
D052	8-719-945-57	DIODE SLH-34YC3 (1CH S VIDEO)		D115	8-719-911-19	DIODE 1SS119	
D053	8-719-945-57	DIODE SLH-34YC3 (1CH VIDEO)		D116	8-719-911-19	DIODE 1SS119	
D054	8-719-945-57	DIODE SLH-34YC3 (1CH VIDEO)		D117	8-719-911-19	DIODE 1SS119	
D055	8-719-945-57	DIODE SLH-34YC3 (2CH S VIDEO)		D119	8-719-812-32	DIODE TLY123 (BLACK BALANCE WIDE RANGE)	
D056	8-719-945-57	DIODE SLH-34YC3 (2CH S VIDEO)		D120	8-719-300-71	DIODE SEL2210R (BLACK BALANCE ON/OFF)	
D057	8-719-945-57	DIODE SLH-34YC3 (2CH VIDEO)		D121	8-719-812-32	DIODE TLY123 (BLACK CLIP)	
D058	8-719-945-57	DIODE SLH-34YC3 (2CH VIDEO)		D123	8-719-940-80	DIODE SLR-34PC3 ()	
D059	8-719-911-19	DIODE 1SS119		D124	8-719-940-80	DIODE SLR-34PC3 ()	
D060	8-719-911-19	DIODE 1SS119		D126	8-719-300-71	DIODE SEL2210R (AUTO SPEED WIPE)	
D061	8-719-911-19	DIODE 1SS119		D127	8-719-300-71	DIODE SEL2210R (AUTO SPEED FADER)	
D062	8-719-911-19	DIODE 1SS119		D128	8-719-812-32	DIODE TLY123 (BACK COLOR)	
		RESISTOR		D129	8-719-812-32	DIODE TLY123 (BLACK)	
R051	1-249-415-11	CARBON 680 5% 1/4W		D130	8-719-812-32	DIODE TLY123 (WHITE)	
R052	1-249-415-11	CARBON 680 5% 1/4W		D132	8-719-812-32	DIODE TLY123 (WHITE BALANCE WIDE RANGE)	
R053	1-249-415-11	CARBON 680 5% 1/4W		D133	8-719-300-71	DIODE SEL2210R (WHITE BALANCE ON/OFF)	
R054	1-249-415-11	CARBON 680 5% 1/4W		D134	8-719-812-32	DIODE TLY123 (WHITE CLIP)	
R055	1-249-428-11	CARBON 8.2K 5% 1/4W		D135	8-719-300-71	DIODE SEL2210R (AUTO SPEED START)	
R056	1-249-429-11	CARBON 10K 5% 1/4W		D136	8-719-300-71	DIODE SEL2210R (VIDEO)	
		*****		D137	8-719-300-71	DIODE SEL2210R (AUDIO)	
		*****				RESISTOR	
		*****		R107	1-249-413-11	CARBON 470 5% 1/4W	
		*****		R108	1-249-413-11	CARBON 470 5% 1/4W	
		*****		R109	1-249-413-11	CARBON 470 5% 1/4W	
		*****		R110	1-249-413-11	CARBON 470 5% 1/4W	
		*****		R112	1-249-413-11	CARBON 470 5% 1/4W	

Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
R116	1-249-437-11	CARBON	47K 5% 1/4W	S111	1-570-797-11	SWITCH, PUSH (1 KEY) (BLACK BALANCE WIDE RANGE)	
R117	1-249-437-11	CARBON	47K 5% 1/4W	S112	1-570-797-11	SWITCH, PUSH (1 KEY) (BLACK CLIP)	
R118	1-249-413-11	CARBON	470 5% 1/4W	S114	1-570-797-21	SWITCH, PUSH (1 KEY) (WIPE PATTERN )	
R119	1-249-413-11	CARBON	470 5% 1/4W	S115	1-570-797-21	SWITCH, PUSH (1 KEY) (WIPE PATTERN )	
R120	1-249-437-11	CARBON	47K 5% 1/4W	S117	1-570-797-11	SWITCH, PUSH (1 KEY) (AUTO SPEED WIPE)	
R121	1-249-413-11	CARBON	470 5% 1/4W	S118	1-570-797-11	SWITCH, PUSH (1 KEY) (AUTO SPEED FADER)	
R124	1-249-413-11	CARBON	470 5% 1/4W	S122	1-570-797-11	SWITCH, PUSH (1 KEY) (WHITE BALANCE ON/OFF)	
R125	1-249-413-11	CARBON	470 5% 1/4W	S123	1-570-797-11	SWITCH, PUSH (1 KEY) (WHITE BALANCE WIDE RANGE)	
R127	1-249-413-11	CARBON	470 5% 1/4W	S124	1-570-797-11	SWITCH, PUSH (1 KEY) (WHITE CLIP)	
R128	1-249-413-11	CARBON	470 5% 1/4W	S125	1-570-797-21	SWITCH, PUSH (1 KEY) (AUTO SPEED START)	
R129	1-249-413-11	CARBON	470 5% 1/4W	S126	1-570-797-11	SWITCH, PUSH (1 KEY) (VIDEO)	
R130	1-249-413-11	CARBON	470 5% 1/4W	S127	1-570-797-11	SWITCH, PUSH (1 KEY) (AUDIO)	
R131	1-249-413-11	CARBON	470 5% 1/4W	S128	1-571-874-11	SWITCH, PYSH (3 KEY) (VIDEO WHITE/BLACK/BACK COLOR)	
R132	1-249-437-11	CARBON	47K 5% 1/4W	*****			
R133	1-249-437-11	CARBON	47K 5% 1/4W	*A-7061-748-A YS-6 BOARD, COMPLETE			
R134	1-249-413-11	CARBON	470 5% 1/4W	*****			
R135	1-249-413-11	CARBON	470 5% 1/4W	*2-352-113-01 CASE, SHIELD			
R136	1-249-437-11	CARBON	47K 5% 1/4W	*2-352-115-01 LID, SHIELD CASE			
R137	1-249-413-11	CARBON	470 5% 1/4W	*2-382-687-11 HOLDER (2), PC BOARD			
R138	1-249-413-11	CARBON	470 5% 1/4W	7-685-646-79 SCREW +BVTP 3X8 TYPE2 IT-3			
R139	1-249-413-11	CARBON	470 5% 1/4W	CAPACITOR			
R140	1-249-413-11	CARBON	470 5% 1/4W	C101	1-124-465-00	ELECT 0.47MF 20% 50V	
R141	1-249-433-11	CARBON	22K 5% 1/4W	C102	1-124-499-11	ELECT 1MF 20% 50V	
R142	1-249-433-11	CARBON	22K 5% 1/4W	C103	1-124-446-11	ELECT 47MF 20% 10V	
R143	1-249-433-11	CARBON	22K 5% 1/4W	C104	1-161-379-00	CERAMIC 0.01MF 30% 16V	
R144	1-249-433-11	CARBON	22K 5% 1/4W	C105	1-124-446-11	ELECT 47MF 20% 10V	
R145	1-249-433-11	CARBON	22K 5% 1/4W	C106	1-161-379-00	CERAMIC 0.01MF 30% 16V	
R146	1-249-433-11	CARBON	22K 5% 1/4W	C107	1-124-446-11	ELECT 47MF 20% 10V	
R147	1-249-433-11	CARBON	22K 5% 1/4W	C108	1-124-446-11	ELECT 47MF 20% 10V	
R148	1-249-433-11	CARBON	22K 5% 1/4W	C109	1-124-465-00	ELECT 0.47MF 20% 50V	
R149	1-249-433-11	CARBON	22K 5% 1/4W	C110	1-124-499-11	ELECT 1MF 20% 50V	
R150	1-249-433-11	CARBON	22K 5% 1/4W	C111	1-124-446-11	ELECT 47MF 20% 10V	
R197	1-249-421-11	CARBON	2.2K 5% 1/4W	C112	1-124-499-11	ELECT 1MF 20% 50V	
R198	1-249-421-11	CARBON	2.2K 5% 1/4W	C113	1-124-446-11	ELECT 47MF 20% 10V	
R199	1-249-433-11	CARBON	22K 5% 1/4W	C114	1-124-465-00	ELECT 0.47MF 20% 50V	
VARIABLE RESISTOR				C115	1-126-101-11	ELECT 100MF 20% 16V	
RV105	1-237-400-11	RES, VAR, CARBON 10K (WHITE CLIP)		C116	1-124-446-11	ELECT 47MF 20% 10V	
RV106	1-237-400-11	RES, VAR, CARBON 10K (BLACK CLIP)		C117	1-124-443-00	ELECT 100MF 20% 10V	
RV107	1-238-564-11	RES, VAR, SLIDE 1K/1K (WIPE)		C118	1-124-443-00	ELECT 100MF 20% 10V	
RV109	1-237-423-21	RES, VAR, CARBON 1K/1K (COLOR CORRECT)		C119	1-123-875-11	ELECT 10MF 20% 50V	
RV110	1-237-423-21	RES, VAR, CARBON 1K/1K (COLIR CORRECT)		C120	1-123-875-11	ELECT 10MF 20% 50V	
RV111	1-238-518-11	RES, VAR, CARBON 250K (AUTO SPEED)		C121	1-124-499-11	ELECT 1MF 20% 50V	
RV112	1-238-563-11	RES, VAR, SLIDE 20K/20K (FADER)		C122	1-162-851-11	CERAMIC 0.1MF 10% 16V	
SWITCH				C123	1-124-499-11	ELECT 1MF 20% 50V	
S104	1-570-797-21	SWITCH, PUSH (1 KEY) (WIPE PATTERN )		C124	1-162-851-11	CERAMIC 0.1MF 10% 16V	
S105	1-570-797-21	SWITCH, PUSH (1 KEY) (WIPE PATTERN )		C125	1-161-379-00	CERAMIC 0.01MF 30% 16V	
S106	1-570-797-21	SWITCH, PUSH (1 KEY) (WIPE PATTERN )					
S107	1-570-797-21	SWITCH, PUSH (1 KEY) (WIPE PATTERN )					
S108	1-570-796-21	SWITCH, ROTARY (COLOR SELECT)					
S110	1-570-797-11	SWITCH, PUSH (1 KEY) (BLACK BALANCE ON/OFF)					

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
C126	1-124-446-11	ELECT	47MF 20% 10V	C236	1-123-875-11	ELECT	10MF 20% 50V
C127	1-161-379-00	CERAMIC	0.01MF 30% 16V	C237	1-123-875-11	ELECT	10MF 20% 50V
C128	1-161-379-00	CERAMIC	0.01MF 30% 16V	C238	1-161-379-00	CERAMIC	0.01MF 30% 16V
C129	1-161-379-00	CERAMIC	0.01MF 30% 16V	C239	1-124-446-11	ELECT	47MF 20% 10V
C130	1-124-446-11	ELECT	47MF 20% 10V	C240	1-161-379-00	CERAMIC	0.01MF 30% 16V
C131	1-161-379-00	CERAMIC	0.01MF 30% 16V	C241	1-124-446-11	ELECT	47MF 20% 10V
C132	1-161-379-00	CERAMIC	0.01MF 30% 16V	C242	1-124-477-11	ELECT	47MF 20% 16V
C133	1-101-880-00	CERAMIC	47PF 5% 50V	C243	1-161-379-00	CERAMIC	0.01MF 30% 16V
C134	1-161-379-00	CERAMIC	0.01MF 30% 16V	C244	1-124-477-11	ELECT	47MF 20% 16V
C135	1-102-973-00	CERAMIC	100PF 5% 50V	C245	1-161-379-00	CERAMIC	0.01MF 30% 16V
C136	1-161-379-00	CERAMIC	0.01MF 30% 16V	C246	1-102-961-00	CERAMIC	27PF 5% 50V
C141	1-126-101-11	ELECT	100MF 20% 16V	C248	1-102-074-00	CERAMIC	0.001MF 10% 50V
C142	1-124-446-11	ELECT	47MF 20% 10V	C249	1-131-348-00	TANTALUM	1.5MF 20% 25V
C143	1-124-443-00	ELECT	100MF 20% 10V	C250	1-162-851-11	CERAMIC	0.1MF 10% 16V
C144	1-124-443-00	ELECT	100MF 20% 10V	C251	1-123-875-11	ELECT	10MF 20% 50V
C145	1-161-379-00	CERAMIC	0.01MF 30% 16V	C252	1-124-477-11	ELECT	47MF 20% 16V
C146	1-124-446-11	ELECT	47MF 20% 10V	C301	1-124-446-11	ELECT	47MF 20% 10V
C147	1-124-446-11	ELECT	47MF 20% 10V	C302	1-124-465-00	ELECT	0.47MF 20% 50V
C148	1-161-379-00	CERAMIC	0.01MF 30% 16V	C303	1-102-959-00	CERAMIC	22PF 5% 50V
C150	1-161-379-00	CERAMIC	0.01MF 30% 16V	C304	1-124-499-11	ELECT	1MF 20% 50V
C151	1-102-959-00	CERAMIC	22PF 5% 50V	C305	1-124-446-11	ELECT	47MF 20% 10V
C202	1-162-851-11	CERAMIC	0.1MF 10% 16V	C306	1-161-379-00	CERAMIC	0.01MF 30% 16V
C203	1-101-880-00	CERAMIC	47PF 5% 50V	C307	1-124-446-11	ELECT	47MF 20% 10V
C204	1-101-880-00	CERAMIC	47PF 5% 50V	C309	1-124-446-11	ELECT	47MF 20% 10V
C205	1-102-973-00	CERAMIC	100PF 5% 50V	C310	1-124-446-11	ELECT	47MF 20% 10V
C206	1-102-973-00	CERAMIC	100PF 5% 50V	C311	1-124-465-00	ELECT	0.47MF 20% 50V
C207	1-102-816-00	CERAMIC	120PF 5% 50V	C314	1-124-477-11	ELECT	47MF 20% 16V
C208	1-101-880-00	CERAMIC	47PF 5% 50V	C315	1-124-446-11	ELECT	47MF 20% 10V
C209	1-161-379-00	CERAMIC	0.01MF 30% 16V	C316	1-162-851-11	CERAMIC	0.1MF 10% 16V
C210	1-161-379-00	CERAMIC	0.01MF 30% 16V	C317	1-102-965-00	CERAMIC	39PF 5% 50V
C211	1-161-379-00	CERAMIC	0.01MF 30% 16V	C318	1-124-499-11	ELECT	1MF 20% 50V
C212	1-123-875-11	ELECT	10MF 20% 50V	C319	1-124-446-11	ELECT	47MF 20% 10V
C213	1-124-446-11	ELECT	47MF 20% 10V	C320	1-161-379-00	CERAMIC	0.01MF 30% 16V
C214	1-123-875-11	ELECT	10MF 20% 50V	C321	1-124-446-11	ELECT	47MF 20% 10V
C215	1-124-499-11	ELECT	1MF 20% 50V	C322	1-161-379-00	CERAMIC	0.01MF 30% 16V
C216	1-124-464-11	ELECT	0.22MF 20% 50V	C323	1-124-499-11	ELECT	1MF 20% 50V
C217	1-124-499-11	ELECT	1MF 20% 50V	C324	1-102-947-00	CERAMIC	10PF 0.5PF 50V
C218	1-126-176-11	ELECT	220MF 20% 10V	C325	1-161-379-00	CERAMIC	0.01MF 30% 16V
C219	1-162-851-11	CERAMIC	0.1MF 10% 16V	C326	1-102-963-00	CERAMIC	33PF 5% 50V
C220	1-124-477-11	ELECT	47MF 20% 16V	C328	1-124-446-11	ELECT	47MF 20% 10V
C221	1-123-875-11	ELECT	10MF 20% 50V	C329	1-161-379-00	CERAMIC	0.01MF 30% 16V
C222	1-123-875-11	ELECT	10MF 20% 50V	C330	1-161-379-00	CERAMIC	0.01MF 30% 16V
C223	1-124-446-11	ELECT	47MF 20% 10V	C331	1-123-875-11	ELECT	10MF 20% 50V
C224	1-161-379-00	CERAMIC	0.01MF 30% 16V	C332	1-162-851-11	CERAMIC	0.1MF 10% 16V
C225	1-124-473-11	ELECT	1000MF 20% 10V	C333	1-123-875-11	ELECT	10MF 20% 50V
C226	1-124-927-11	ELECT	4.7MF 20% 50V	C334	1-161-379-00	CERAMIC	0.01MF 30% 16V
C227	1-124-473-11	ELECT	1000MF 20% 10V	C335	1-123-875-11	ELECT	10MF 20% 50V
C228	1-124-927-11	ELECT	4.7MF 20% 50V	C336	1-161-379-00	CERAMIC	0.01MF 30% 16V
C229	1-161-379-00	CERAMIC	0.01MF 30% 16V	C337	1-102-947-00	CERAMIC	10PF 0.5PF 50V
C230	1-161-379-00	CERAMIC	0.01MF 30% 16V	C338	1-124-902-00	ELECT	0.47MF 20% 50V
C231	1-161-379-00	CERAMIC	0.01MF 30% 16V	C341	1-102-824-00	CERAMIC	470PF 10% 50V
C234	1-123-875-11	ELECT	10MF 20% 50V	C342	1-124-927-11	ELECT	4.7MF 20% 50V
C235	1-124-465-00	ELECT	0.47MF 20% 50V	C343	1-124-499-11	ELECT	1MF 20% 50V

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
C344	1-161-379-00	CERAMIC	0.01MF 30% 16V	C404	1-161-379-00	CERAMIC	0.01MF 30% 16V
C345	1-161-379-00	CERAMIC	0.01MF 30% 16V	C405	1-162-851-11	CERAMIC	0.1MF 10% 16V
C346	1-124-446-11	ELECT	47MF 20% 10V	C406	1-162-851-11	CERAMIC	0.1MF 10% 16V
C347	1-161-379-00	CERAMIC	0.01MF 30% 16V	C407	1-162-851-11	CERAMIC	0.1MF 10% 16V
C350	1-102-959-00	CERAMIC	22PF 5% 50V	C408	1-162-851-11	CERAMIC	0.1MF 10% 16V
C351	1-161-379-00	CERAMIC	0.01MF 30% 16V	C409	1-162-851-11	CERAMIC	0.1MF 10% 16V
C352	1-161-379-00	CERAMIC	0.01MF 30% 16V	C410	1-124-477-11	ELECT	47MF 20% 16V
C353	1-161-379-00	CERAMIC	0.01MF 30% 16V	C411	1-124-477-11	ELECT	47MF 20% 16V
C354	1-124-446-11	ELECT	47MF 20% 10V	C412	1-124-477-11	ELECT	47MF 20% 16V
C355	1-124-446-11	ELECT	47MF 20% 10V	C413	1-161-379-00	CERAMIC	0.01MF 30% 16V
C356	1-161-379-00	CERAMIC	0.01MF 30% 16V	C414	1-124-446-11	ELECT	47MF 20% 10V
C357	1-124-477-11	ELECT	47MF 20% 16V	C415	1-161-379-00	CERAMIC	0.01MF 30% 16V
C358	1-161-379-00	CERAMIC	0.01MF 30% 16V	C416	1-124-477-11	ELECT	47MF 20% 25V
C359	1-124-446-11	ELECT	47MF 20% 10V	C417	1-161-379-00	CERAMIC	0.01MF 30% 16V
C360	1-124-499-11	ELECT	1MF 20% 50V	C418	1-124-902-00	ELECT	0.47MF 20% 50V
C361	1-101-880-00	CERAMIC	47PF 5% 50V	C419	1-123-875-11	ELECT	10MF 20% 50V
C362	1-124-446-11	ELECT	47MF 20% 10V	C420	1-161-379-00	CERAMIC	0.01MF 30% 16V
C363	1-124-446-11	ELECT	47MF 20% 10V	C421	1-101-888-00	CERAMIC	68PF 5% 50V
C364	1-124-446-11	ELECT	47MF 20% 10V	C422	1-161-379-00	CERAMIC	0.01MF 30% 16V
C365	1-124-446-11	ELECT	47MF 20% 10V	C423	1-124-446-11	ELECT	47MF 20% 10V
C366	1-131-381-00	TANTALUM	47MF 10% 10V	C424	1-124-446-11	ELECT	47MF 20% 10V
C367	1-124-446-11	ELECT	47MF 20% 10V	C425	1-161-379-00	CERAMIC	0.01MF 30% 16V
C368	1-161-379-00	CERAMIC	0.01MF 30% 16V	C426	1-126-176-11	ELECT	220MF 20% 10V
C371	1-124-910-11	ELECT	47MF 20% 50V	C427	1-126-176-11	ELECT	220MF 20% 10V
C372	1-161-379-00	CERAMIC	0.01MF 30% 16V	C500	1-123-875-11	ELECT	10MF 20% 50V
C373	1-131-381-00	TANTALUM	47MF 10% 10V	C503	1-102-947-00	CERAMIC	10PF 0.5PF 50V
C374	1-131-363-00	TANTALUM	4.7MF 10% 16V	<u>CONNECTOR</u>			
C375	1-131-363-00	TANTALUM	4.7MF 10% 16V	CN100	1-506-469-11	PIN, CONNECTOR	4P
C376	1-124-446-11	ELECT	47MF 20% 10V	CN101	1-506-469-11	PIN, CONNECTOR	4P
C377	1-124-477-11	ELECT	47MF 20% 16V	CN103	1-506-468-11	PIN, CONNECTOR	3P
C378	1-124-465-00	ELECT	0.47MF 20% 50V	CN104	1-506-470-11	PIN, CONNECTOR	5P
C379	1-161-379-00	CERAMIC	0.01MF 30% 16V	CN105	*1-506-470-11	PIN, CONNECTOR	5P
C380	1-124-446-11	ELECT	47MF 20% 10V	CN113	1-506-468-11	PIN, CONNECTOR	3P
C383	1-123-875-11	ELECT	10MF 20% 50V	CN115	*1-560-892-00	PIN, CONNECTOR	4P
C384	1-123-875-11	ELECT	10MF 20% 50V	CN119	1-506-469-11	PIN, CONNECTOR	4P
C385	1-124-465-00	ELECT	0.47MF 20% 50V	CN124	1-506-468-11	PIN, CONNECTOR	3P
C386	1-124-499-11	ELECT	1MF 20% 50V	CN127	1-506-468-11	PIN, CONNECTOR	3P
C387	1-101-980-00	CERAMIC	47PF 5% 50V	CN128	1-506-471-11	PIN, CONNECTOR	6P
C388	1-102-951-00	CERAMIC	15PF 5% 50V	CN511	1-506-467-11	PIN, CONNECTOR	2P
C389	1-102-959-00	CERAMIC	22PF 5% 50V	<u>TRIMMER</u>			
C391	1-124-446-11	ELECT	47MF 20% 10V	CV205	1-141-245-00	TRIMMER, CERAMIC	
C392	1-124-446-11	ELECT	47MF 20% 10V	CV247	1-141-245-00	TRIMMER, CERAMIC	
C393	1-161-379-00	CERAMIC	0.01MF 30% 16V	<u>DIODE</u>			
C394	1-161-379-00	CERAMIC	0.01MF 30% 16V	D101	8-719-911-19	DIODE 1SS119	
C395	1-124-446-11	ELECT	47MF 20% 10V	D102	8-719-911-19	DIODE 1SS119	
C396	1-124-446-11	ELECT	47MF 20% 10V	D103	8-719-911-19	DIODE 1SS119	
C397	1-124-446-11	ELECT	47MF 20% 10V	D104	8-719-911-19	DIODE 1SS119	
C398	1-102-816-00	CERAMIC	120PF 5% 50V	D201	8-719-911-19	DIODE 1SS119	
C399	1-124-446-11	ELECT	47MF 20% 10V	D203	8-719-109-86	DIODE RD5.1ESB3	
C400	1-102-965-00	CERAMIC	39PF 5% 50V				
C401	1-124-477-11	ELECT	47MF 20% 16V				
C402	1-161-379-00	CERAMIC	0.01MF 30% 16V				
C403	1-124-446-11	ELECT	47MF 20% 10V				

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Ref.No	Part No.	Description
D204	8-719-911-19	DIODE 1SS119
D205	8-719-911-19	DIODE 1SS119
D209	8-719-911-19	DIODE 1SS119
D210	8-719-911-19	DIODE 1SS119
D211	8-719-911-19	DIODE 1SS119
D233	8-719-920-95	DIODE 1T25-0
D301	8-719-911-19	DIODE 1SS119
D302	8-719-911-19	DIODE 1SS119
D303	8-719-911-19	DIODE 1SS119
D304	8-719-911-19	DIODE 1SS119
D305	8-719-911-19	DIODE 1SS119
D306	8-719-911-19	DIODE 1SS119
D307	8-719-911-19	DIODE 1SS119
D308	8-719-911-19	DIODE 1SS119
D309	8-719-911-19	DIODE 1SS119
D310	8-719-911-19	DIODE 1SS119
D311	8-719-911-19	DIODE 1SS119
D312	8-719-911-19	DIODE 1SS119

IC

IC101	8-759-140-53	IC UPD4053BC
IC102	8-759-603-55	IC M51272P
IC103	8-759-602-06	IC M5109P
IC104	8-759-001-42	IC MC74HC174N
IC201	8-759-140-53	IC UPD4053BC
IC202	8-752-321-16	IC CXD1030M
IC203	8-752-006-12	IC CX20061
IC204	8-759-302-99	IC CX20186
IC205	8-759-001-42	IC MC74HC174N
IC207	8-759-140-53	IC UPD4053BC
IC208	8-759-103-19	IC UPC319C
IC301	8-759-140-53	IC UPD4053BC
IC302	8-759-140-53	IC UPD4053BC
IC303	8-759-140-53	IC UPD4053BC
IC304	8-759-602-06	IC M5109P
IC305	8-759-602-06	IC M5109P
IC306	8-759-973-61	IC TL026CP
IC307	8-759-990-82	IC TL082CP
IC308	8-759-132-40	IC UPC324C
IC309	8-759-973-61	IC TL026CP

COIL

L147	1-410-478-11	INDUCTOR	47UH
L201	1-410-476-11	INDUCTOR	33UH
L202	1-408-411-00	INDUCTOR	15UH
L301	1-410-471-11	INDUCTOR	12UH
L302	1-410-478-11	INDUCTOR	47UH

TRANSISTOR

Q101	8-729-900-80	TRANSISTOR DTC114ES
Q102	8-729-625-91	TRANSISTOR 2SC2259-F
Q103	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q104	8-729-139-96	TRANSISTOR 2SC2785-HFE
Q105	8-729-900-80	TRANSISTOR DTC114ES

Remark	Ref.No	Part No.	Description	Remark
	Q106	8-729-625-91	TRANSISTOR 2SC2259-F	
	Q107	8-729-625-91	TRANSISTOR 2SC2259-F	
	Q108	8-729-900-80	TRANSISTOR DTC114ES	
	Q109	8-729-900-80	TRANSISTOR DTC114ES	
	Q110	8-729-900-80	TRANSISTOR DTC114ES	
	Q111	8-729-139-96	TRANSISTOR 2SC2785-HFE	
	Q112	8-729-139-96	TRANSISTOR 2SC2785-HFE	
	Q113	8-729-139-96	TRANSISTOR 2SC2785-HFE	
	Q114	8-729-139-96	TRANSISTOR 2SC2785-HFE	
	Q115	8-729-139-96	TRANSISTOR 2SC2785-HFE	
	Q116	8-729-900-80	TRANSISTOR DTC114ES	
	Q117	8-729-139-96	TRANSISTOR 2SC2785-HFE	
	Q118	8-729-139-96	TRANSISTOR 2SC2785-HFE	
	Q120	8-729-139-96	TRANSISTOR 2SC2785-HFE	
	Q121	8-729-139-96	TRANSISTOR 2SC2785-HFE	
	Q122	8-729-900-80	TRANSISTOR DTC114ES	
	Q123	8-729-900-80	TRANSISTOR DTC114ES	
	Q124	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q125	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q126	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q127	8-729-173-38	TRANSISTOR 2SA733-K	
	Q201	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q202	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q203	8-729-900-80	TRANSISTOR DTC114ES	
	Q204	8-729-900-61	TRANSISTOR DTA114ES	
	Q205	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q206	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q207	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q208	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q209	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q211	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q212	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q213	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q214	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q215	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q216	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q217	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q218	8-729-173-38	TRANSISTOR 2SA733-K	
	Q219	8-729-173-38	TRANSISTOR 2SA733-K	
	Q220	8-729-173-38	TRANSISTOR 2SA733-K	
	Q221	8-729-173-38	TRANSISTOR 2SA733-K	
	Q222	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q223	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q301	8-729-173-38	TRANSISTOR 2SA733-K	
	Q302	8-729-900-61	TRANSISTOR DTA114ES	
	Q303	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q304	8-729-173-38	TRANSISTOR 2SA733-K	
	Q305	8-729-173-38	TRANSISTOR 2SA733-K	
	Q306	8-729-173-38	TRANSISTOR 2SA733-K	
	Q307	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q308	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q309	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q310	8-729-119-78	TRANSISTOR 2SC2785-HFE	

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
Q311	8-729-173-38	TRANSISTOR 2SA733-K		Q375	8-729-625-91	TRANSISTOR 2SC2259-F	
Q312	8-729-119-78	TRANSISTOR 2SC2785-HFE		Q376	8-729-173-38	TRANSISTOR 2SA733-K	
Q313	8-729-173-38	TRANSISTOR 2SA733-K		Q377	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q314	8-729-119-78	TRANSISTOR 2SC2785-HFE		Q378	8-729-900-80	TRANSISTOR DTC114ES	
Q315	8-729-119-78	TRANSISTOR 2SC2785-HFE		Q379	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q316	8-729-173-38	TRANSISTOR 2SA733-K		Q380	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q318	8-729-173-38	TRANSISTOR 2SA733-K		RESISTOR			
Q319	8-729-119-78	TRANSISTOR 2SC2785-HFE		R101	1-249-413-11	CARBON 470 5% 1/4W	
Q320	8-729-173-38	TRANSISTOR 2SA733-K		R102	1-249-413-11	CARBON 470 5% 1/4W	
Q321	8-729-119-78	TRANSISTOR 2SC2785-HFE		R103	1-249-417-11	CARBON 1K 5% 1/4W	
Q322	8-729-900-61	TRANSISTOR DTA114ES		R104	1-249-413-11	CARBON 470 5% 1/4W	
Q323	8-729-119-78	TRANSISTOR 2SC2785-HFE		R105	1-249-417-11	CARBON 1K 5% 1/4W	
Q324	8-729-119-78	TRANSISTOR 2SC2785-HFE		R106	1-249-424-11	CARBON 3.9K 5% 1/4W	
Q325	8-729-119-78	TRANSISTOR 2SC2785-HFE		R107	1-249-408-11	CARBON 180 5% 1/4W	
Q326	8-729-119-78	TRANSISTOR 2SC2785-HFE		R108	1-249-421-11	CARBON 2.2K 5% 1/4W	
Q327	8-729-173-38	TRANSISTOR 2SA733-K		R109	1-249-433-11	CARBON 22K 5% 1/4W	
Q328	8-729-119-78	TRANSISTOR 2SC2785-HFE		R110	1-249-429-11	CARBON 10K 5% 1/4W	
Q329	8-729-900-80	TRANSISTOR DTC114ES		R111	1-249-417-11	CARBON 1K 5% 1/4W	
Q330	8-729-119-78	TRANSISTOR 2SC2785-HFE		R112	1-249-417-11	CARBON 1K 5% 1/4W	
Q331	8-729-173-38	TRANSISTOR 2SA733-K		R113	1-249-421-11	CARBON 2.2K 5% 1/4W	
Q332	8-729-119-78	TRANSISTOR 2SC2785-HFE		R114	1-249-413-11	CARBON 470 5% 1/4W	
Q333	8-729-119-78	TRANSISTOR 2SC2785-HFE		R115	1-249-417-11	CARBON 1K 5% 1/4W	
Q334	8-729-173-38	TRANSISTOR 2SA733-K		R116	1-249-413-11	CARBON 470 5% 1/4W	
Q335	8-729-119-78	TRANSISTOR 2SC2785-HFE		R117	1-249-417-11	CARBON 1K 5% 1/4W	
Q336	8-729-119-78	TRANSISTOR 2SC2785-HFE		R118	1-249-417-11	CARBON 1K 5% 1/4W	
Q337	8-729-173-38	TRANSISTOR 2SA733-K		R119	1-249-413-11	CARBON 470 5% 1/4W	
Q338	8-729-119-78	TRANSISTOR 2SC2785-HFE		R120	1-249-417-11	CARBON 1K 5% 1/4W	
Q340	8-729-119-78	TRANSISTOR 2SC2785-HFE		R121	1-249-413-11	CARBON 470 5% 1/4W	
Q341	8-729-119-78	TRANSISTOR 2SC2785-HFE		R124	1-249-421-11	CARBON 2.2K 5% 1/4W	
Q342	8-729-173-38	TRANSISTOR 2SA733-K		R125	1-249-410-11	CARBON 270 5% 1/4W	
Q343	8-729-119-78	TRANSISTOR 2SC2785-HFE		R126	1-249-417-11	CARBON 1K 5% 1/4W	
Q344	8-729-119-78	TRANSISTOR 2SC2785-HFE		R127	1-249-433-11	CARBON 22K 5% 1/4W	
Q345	8-729-119-78	TRANSISTOR 2SC2785-HFE		R128	1-249-429-11	CARBON 10K 5% 1/4W	
Q346	8-729-119-78	TRANSISTOR 2SC2785-HFE		R129	1-249-418-11	CARBON 1.2K 5% 1/4W	
Q347	8-729-119-78	TRANSISTOR 2SC2785-HFE		R130	1-249-417-11	CARBON 1K 5% 1/4W	
Q348	8-729-119-78	TRANSISTOR 2SC2785-HFE		R131	1-249-429-11	CARBON 10K 5% 1/4W	
Q349	8-729-119-78	TRANSISTOR 2SC2785-HFE		R132	1-249-413-11	CARBON 470 5% 1/4W	
Q350	8-729-119-78	TRANSISTOR 2SC2785-HFE		R133	1-249-421-11	CARBON 2.2K 5% 1/4W	
Q351	8-729-173-38	TRANSISTOR 2SA733-K		R134	1-249-413-11	CARBON 470 5% 1/4W	
Q352	8-729-173-38	TRANSISTOR 2SA733-K		R135	1-249-429-11	CARBON 10K 5% 1/4W	
Q353	8-729-625-91	TRANSISTOR 2SC2259-F		R136	1-249-421-11	CARBON 2.2K 5% 1/4W	
Q354	8-729-697-92	TRANSISTOR 2SA979		R137	1-249-417-11	CARBON 1K 5% 1/4W	
Q355	8-729-119-78	TRANSISTOR 2SC2785-HFE		R138	1-249-417-11	CARBON 1K 5% 1/4W	
Q356	8-729-119-78	TRANSISTOR 2SC2785-HFE		R139	1-249-421-11	CARBON 2.2K 5% 1/4W	
Q357	8-729-119-78	TRANSISTOR 2SC2785-HFE		R140	1-249-421-11	CARBON 2.2K 5% 1/4W	
Q359	8-729-173-38	TRANSISTOR 2SA733-K		R141	1-249-429-11	CARBON 10K 5% 1/4W	
Q360	8-729-119-78	TRANSISTOR 2SC2785-HFE		R142	1-249-429-11	CARBON 10K 5% 1/4W	
Q361	8-729-119-78	TRANSISTOR 2SC2785-HFE		R143	1-215-453-00	METAL 22K 1% 1/6W	
Q370	8-729-119-78	TRANSISTOR 2SC2785-HFE		R144	1-215-449-00	METAL 15K 1% 1/6W	
Q371	8-729-173-38	TRANSISTOR 2SA733-K		R145	1-215-453-00	METAL 22K 1% 1/6W	
Q372	8-729-119-78	TRANSISTOR 2SC2785-HFE		R146	1-215-449-00	METAL 15K 1% 1/6W	
Q373	8-729-119-78	TRANSISTOR 2SC2785-HFE		R149	1-249-429-11	CARBON 10K 5% 1/4W	
Q374	8-729-173-38	TRANSISTOR 2SA733-K					

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
R150	1-249-433-11	CARBON	22K 5% 1/4W	R224	1-249-426-11	CARBON	5.6K 5% 1/4W
R151	1-249-411-11	CARBON	330 5% 1/4W	R225	1-249-417-11	CARBON	1K 5% 1/4W
R152	1-249-409-11	CARBON	220 5% 1/4W	R226	1-249-417-11	CARBON	1K 5% 1/4W
R153	1-249-413-11	CARBON	470 5% 1/4W	R227	1-249-433-11	CARBON	22K 5% 1/4W
R154	1-249-417-11	CARBON	1K 5% 1/4W	R228	1-249-423-11	CARBON	3.3K 5% 1/4W
R155	1-249-413-11	CARBON	470 5% 1/4W	R229	1-247-903-00	CARBON	1M 5% 1/4W
R158	1-249-413-11	CARBON	470 5% 1/4W	R230	1-247-893-11	CARBON	390K 5% 1/4W
R159	1-249-421-11	CARBON	2.2K 5% 1/4W	R231	1-249-417-11	CARBON	1K 5% 1/4W
R160	1-249-409-11	CARBON	220 5% 1/4W	R232	1-249-413-11	CARBON	470 5% 1/4W
R161	1-249-421-11	CARBON	2.2K 5% 1/4W	R233	1-249-429-11	CARBON	10K 5% 1/4W
R162	1-249-417-11	CARBON	1K 5% 1/4W	R234	1-249-417-11	CARBON	1K 5% 1/4W
R163	1-249-417-11	CARBON	1K 5% 1/4W	R241	1-249-413-11	CARBON	470 5% 1/4W
R164	1-249-411-11	CARBON	330 5% 1/4W	R242	1-249-433-11	CARBON	22K 5% 1/4W
R165	1-249-416-11	CARBON	820 5% 1/4W	R243	1-249-417-11	CARBON	1K 5% 1/4W
R166	1-249-413-11	CARBON	470 5% 1/4W	R244	1-249-413-11	CARBON	470 5% 1/4W
R167	1-249-416-11	CARBON	820 5% 1/4W	R245	1-249-433-11	CARBON	22K 5% 1/4W
R170	1-249-413-11	CARBON	470 5% 1/4W	R246	1-249-417-11	CARBON	1K 5% 1/4W
R171	1-249-421-11	CARBON	2.2K 5% 1/4W	R247	1-249-429-11	CARBON	10K 5% 1/4W
R172	1-249-410-11	CARBON	270 5% 1/4W	R248	1-247-838-00	CARBON	2K 5% 1/4W
R173	1-249-417-11	CARBON	1K 5% 1/4W	R249	1-247-838-00	CARBON	2K 5% 1/4W
R174	1-249-433-11	CARBON	22K 5% 1/4W	R251	1-247-838-00	CARBON	2K 5% 1/4W
R175	1-249-429-11	CARBON	10K 5% 1/4W	R252	1-247-838-00	CARBON	2K 5% 1/4W
R176	1-249-418-11	CARBON	1.2K 5% 1/4W	R254	1-249-429-11	CARBON	10K 5% 1/4W
R177	1-249-417-11	CARBON	1K 5% 1/4W	R255	1-249-429-11	CARBON	10K 5% 1/4W
R178	1-249-429-11	CARBON	10K 5% 1/4W	R256	1-249-421-11	CARBON	2.2K 5% 1/4W
R179	1-249-413-11	CARBON	470 5% 1/4W	R257	1-249-426-11	CARBON	5.6K 5% 1/4W
R180	1-249-421-11	CARBON	2.2K 5% 1/4W	R258	1-249-409-11	CARBON	220 5% 1/4W
R181	1-249-429-11	CARBON	10K 5% 1/4W	R259	1-249-425-11	CARBON	4.7K 5% 1/4W
R182	1-249-413-11	CARBON	470 5% 1/4W	R260	1-249-417-11	CARBON	1K 5% 1/4W
R183	1-249-421-11	CARBON	2.2K 5% 1/4W	R262	1-249-436-11	CARBON	39K 5% 1/4W
R184	1-249-417-11	CARBON	1K 5% 1/4W	R263	1-249-419-11	CARBON	1.5K 5% 1/4W
R185	1-249-417-11	CARBON	1K 5% 1/4W	R264	1-249-413-11	CARBON	470 5% 1/4W
R186	1-249-429-11	CARBON	10K 5% 1/4W	R265	1-249-417-11	CARBON	1K 5% 1/4W
R200	1-249-429-11	CARBON	10K 5% 1/4W	R266	1-249-417-11	CARBON	1K 5% 1/4W
R201	1-249-429-11	CARBON	10K 5% 1/4W	R267	1-249-434-11	CARBON	27K 5% 1/4W
R202	1-249-429-11	CARBON	10K 5% 1/4W	R268	1-249-437-11	CARBON	47K 5% 1/4W
R203	1-249-415-11	CARBON	680 5% 1/4W	R269	1-249-409-11	CARBON	220 5% 1/4W
R204	1-249-413-11	CARBON	470 5% 1/4W	R270	1-249-425-11	CARBON	4.7K 5% 1/4W
R206	1-249-408-11	CARBON	180 5% 1/4W	R271	1-249-413-11	CARBON	470 5% 1/4W
R207	1-249-417-11	CARBON	1K 5% 1/4W	R272	1-249-413-11	CARBON	470 5% 1/4W
R208	1-249-417-11	CARBON	1K 5% 1/4W	R273	1-249-425-11	CARBON	4.7K 5% 1/4W
R209	1-247-903-00	CARBON	1M 5% 1/4W	R274	1-249-426-11	CARBON	5.6K 5% 1/4W
R211	1-249-414-11	CARBON	560 5% 1/4W	R279	1-249-441-11	CARBON	100K 5% 1/4W
R212	1-249-431-11	CARBON	15K 5% 1/4W	R280	1-249-429-11	CARBON	10K 5% 1/4W
R213	1-249-425-11	CARBON	4.7K 5% 1/4W	R281	1-247-887-00	CARBON	220K 5% 1/4W
R214	1-249-433-11	CARBON	22K 5% 1/4W	R282	1-249-425-11	CARBON	4.7K 5% 1/4W
R215	1-249-437-11	CARBON	47K 5% 1/4W	R283	1-249-429-11	CARBON	10K 5% 1/4W
R216	1-249-429-11	CARBON	10K 5% 1/4W	R286	1-249-430-11	CARBON	12K 5% 1/4W
R217	1-249-421-11	CARBON	2.2K 5% 1/4W	R288	1-249-433-11	CARBON	22K 5% 1/4W
R219	1-249-415-11	CARBON	680 5% 1/4W	R301	1-249-413-11	CARBON	470 5% 1/4W
R221	1-249-429-11	CARBON	10K 5% 1/4W	R302	1-249-429-11	CARBON	10K 5% 1/4W
R222	1-249-421-11	CARBON	2.2K 5% 1/4W	R303	1-249-435-11	CARBON	33K 5% 1/4W
R223	1-249-438-11	CARBON	56K 5% 1/4W	R304	1-249-417-11	CARBON	1K 5% 1/4W

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
R305	1-249-413-11	CARBON	470 5% 1/4W	R361	1-249-421-11	CARBON	2.2K 5% 1/4W
R306	1-249-405-11	CARBON	100 5% 1/4W	R362	1-249-413-11	CARBON	470 5% 1/4W
R307	1-249-421-11	CARBON	2.2K 5% 1/4W	R363	1-249-423-11	CARBON	3.3K 5% 1/4W
R308	1-249-418-11	CARBON	1.2K 5% 1/4W	R364	1-215-437-00	METAL	4.7K 1% 1/6W
R309	1-249-423-11	CARBON	3.3K 5% 1/4W	R365	1-215-425-00	METAL	1.5K 1% 1/6W
R310	1-249-413-11	CARBON	470 5% 1/4W	R366	1-249-425-11	CARBON	4.7K 5% 1/4W
R311	1-249-421-11	CARBON	2.2K 5% 1/4W	R368	1-249-421-11	CARBON	2.2K 5% 1/4W
R312	1-249-422-11	CARBON	2.7K 5% 1/4W	R369	1-249-413-11	CARBON	470 5% 1/4W
R313	1-249-418-11	CARBON	1.2K 5% 1/4W	R370	1-249-411-11	CARBON	330 5% 1/4W
R314	1-249-413-11	CARBON	470 5% 1/4W	R371	1-249-416-11	CARBON	820 5% 1/4W
R315	1-249-423-11	CARBON	3.3K 5% 1/4W	R372	1-249-417-11	CARBON	1K 5% 1/4W
R316	1-249-413-11	CARBON	470 5% 1/4W	R373	1-249-417-11	CARBON	1K 5% 1/4W
R317	1-249-431-11	CARBON	15K 5% 1/4W	R374	1-249-416-11	CARBON	820 5% 1/4W
R318	1-249-425-11	CARBON	4.7K 5% 1/4W	R375	1-249-419-11	CARBON	1.5K 5% 1/4W
R319	1-249-413-11	CARBON	470 5% 1/4W	R376	1-249-409-11	CARBON	220 5% 1/4W
R320	1-249-421-11	CARBON	2.2K 5% 1/4W	R377	1-249-413-11	CARBON	470 5% 1/4W
R321	1-249-421-11	CARBON	2.2K 5% 1/4W	R378	1-249-421-11	CARBON	2.2K 5% 1/4W
R322	1-249-433-11	CARBON	22K 5% 1/4W	R379	1-249-405-11	CARBON	100 5% 1/4W
R323	1-249-413-11	CARBON	470 5% 1/4W	R380	1-249-409-11	CARBON	220 5% 1/4W
R324	1-249-413-11	CARBON	470 5% 1/4W	R381	1-249-415-11	CARBON	680 5% 1/4W
R325	1-249-417-11	CARBON	1K 5% 1/4W	R382	1-249-421-11	CARBON	2.2K 5% 1/4W
R326	1-249-413-11	CARBON	470 5% 1/4W	R383	1-249-411-11	CARBON	330 5% 1/4W
R327	1-249-429-11	CARBON	10K 5% 1/4W	R384	1-249-416-11	CARBON	820 5% 1/4W
R328	1-249-413-11	CARBON	470 5% 1/4W	R385	1-249-416-11	CARBON	820 5% 1/4W
R329	1-249-421-11	CARBON	2.2K 5% 1/4W	R387	1-249-417-11	CARBON	1K 5% 1/4W
R330	1-249-433-11	CARBON	22K 5% 1/4W	R389	1-249-413-11	CARBON	470 5% 1/4W
R331	1-249-429-11	CARBON	10K 5% 1/4W	R390	1-249-421-11	CARBON	2.2K 5% 1/4W
R332	1-249-413-11	CARBON	470 5% 1/4W	R391	1-249-421-11	CARBON	2.2K 5% 1/4W
R333	1-249-413-11	CARBON	470 5% 1/4W	R392	1-249-426-11	CARBON	5.6K 5% 1/4W
R335	1-249-408-11	CARBON	180 5% 1/4W	R393	1-249-425-11	CARBON	4.7K 5% 1/4W
R336	1-249-421-11	CARBON	2.2K 5% 1/4W	R394	1-249-413-11	CARBON	470 5% 1/4W
R337	1-249-413-11	CARBON	470 5% 1/4W	R395	1-249-413-11	CARBON	470 5% 1/4W
R338	1-249-426-11	CARBON	5.6K 5% 1/4W	R396	1-249-421-11	CARBON	2.2K 5% 1/4W
R339	1-249-417-11	CARBON	1K 5% 1/4W	R397	1-249-417-11	CARBON	1K 5% 1/4W
R340	1-249-417-11	CARBON	1K 5% 1/4W	R398	1-215-421-00	METAL	1K 1% 1/6W
R341	1-249-413-11	CARBON	470 5% 1/4W	R399	1-215-421-00	METAL	1K 1% 1/6W
R342	1-249-413-11	CARBON	470 5% 1/4W	R400	1-249-429-11	CARBON	10K 5% 1/4W
R343	1-249-417-11	CARBON	1K 5% 1/4W	R401	1-249-413-11	CARBON	470 5% 1/4W
R344	1-249-411-11	CARBON	330 5% 1/4W	R402	1-249-429-11	CARBON	10K 5% 1/4W
R345	1-249-417-11	CARBON	1K 5% 1/4W	R403	1-249-433-11	CARBON	22K 5% 1/4W
R348	1-249-421-11	CARBON	2.2K 5% 1/4W	R404	1-249-421-11	CARBON	2.2K 5% 1/4W
R349	1-249-441-11	CARBON	100K 5% 1/4W	R405	1-249-417-11	CARBON	1K 5% 1/4W
R350	1-249-431-11	CARBON	15K 5% 1/4W	R406	1-249-421-11	CARBON	2.2K 5% 1/4W
R351	1-249-427-11	CARBON	6.8K 5% 1/4W	R407	1-249-411-11	CARBON	330 5% 1/4W
R352	1-249-435-11	CARBON	33K 5% 1/4W	R408	1-249-417-11	CARBON	1K 5% 1/4W
R353	1-249-435-11	CARBON	33K 5% 1/4W	R409	1-249-415-11	CARBON	680 5% 1/4W
R354	1-249-408-11	CARBON	180 5% 1/4W	R410	1-249-406-11	CARBON	120 5% 1/4W
R355	1-249-421-11	CARBON	2.2K 5% 1/4W	R411	1-249-421-11	CARBON	2.2K 5% 1/4W
R356	1-249-423-11	CARBON	3.3K 5% 1/4W	R413	1-249-421-11	CARBON	2.2K 5% 1/4W
R357	1-249-413-11	CARBON	470 5% 1/4W	R414	1-249-416-11	CARBON	820 5% 1/4W
R358	1-249-429-11	CARBON	10K 5% 1/4W	R415	1-249-421-11	CARBON	2.2K 5% 1/4W
R359	1-249-425-11	CARBON	4.7K 5% 1/4W	R416	1-249-406-11	CARBON	120 5% 1/4W
R360	1-249-433-11	CARBON	22K 5% 1/4W	R417	1-249-421-11	CARBON	2.2K 5% 1/4W

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
R418	1-249-418-11	CARBON	1.2K 5% 1/4W	R474	1-249-417-11	CARBON	1K 5% 1/4W
R419	1-247-903-00	CARBON	1M 5% 1/4W	R475	1-249-417-11	CARBON	1K 5% 1/4W
R420	1-247-903-00	CARBON	1M 5% 1/4W	R476	1-249-425-11	CARBON	4.7K 5% 1/4W
R421	1-249-417-11	CARBON	1K 5% 1/4W	R477	1-249-431-11	CARBON	15K 5% 1/4W
R422	1-249-417-11	CARBON	1K 5% 1/4W	R478	1-249-413-11	CARBON	470 5% 1/4W
R423	1-249-417-11	CARBON	1K 5% 1/4W	R479	1-249-421-11	CARBON	2.2K 5% 1/4W
R424	1-249-417-11	CARBON	1K 5% 1/4W	R480	1-249-433-11	CARBON	22K 5% 1/4W
R425	1-249-427-11	CARBON	6.8K 5% 1/4W	R481	1-249-425-11	CARBON	4.7K 5% 1/4W
R426	1-249-429-11	CARBON	10K 5% 1/4W	R482	1-249-411-11	CARBON	330 5% 1/4W
R427	1-249-429-11	CARBON	10K 5% 1/4W	R483	1-249-417-11	CARBON	1K 5% 1/4W
R428	1-249-431-11	CARBON	15K 5% 1/4W	R484	1-249-411-11	CARBON	330 5% 1/4W
R429	1-249-429-11	CARBON	10K 5% 1/4W	R485	1-249-411-11	CARBON	330 5% 1/4W
R430	1-249-417-11	CARBON	1K 5% 1/4W	R486	1-249-413-11	CARBON	470 5% 1/4W
R431	1-249-421-11	CARBON	2.2K 5% 1/4W	R487	1-249-423-11	CARBON	3.3K 5% 1/4W
R432	1-249-419-11	CARBON	1.5K 5% 1/4W	R488	1-249-413-11	CARBON	470 5% 1/4W
R433	1-249-421-11	CARBON	2.2K 5% 1/4W	R489	1-215-445-00	METAL	10K 1% 1/6W
R435	1-249-415-11	CARBON	680 5% 1/4W	R490	1-215-445-00	METAL	10K 1% 1/6W
R436	1-249-413-11	CARBON	470 5% 1/4W	R491	1-249-419-11	CARBON	1.5K 5% 1/4W
R437	1-249-408-11	CARBON	180 5% 1/4W	R492	1-249-413-11	CARBON	470 5% 1/4W
R438	1-249-421-11	CARBON	2.2K 5% 1/4W	R493	1-249-419-11	CARBON	1.5K 5% 1/4W
R439	1-249-411-11	CARBON	330 5% 1/4W	R494	1-249-413-11	CARBON	470 5% 1/4W
R440	1-249-413-11	CARBON	470 5% 1/4W	R495	1-249-421-11	CARBON	2.2K 5% 1/4W
R441	1-249-423-11	CARBON	3.3K 5% 1/4W	R496	1-215-421-00	METAL	1K 1% 1/6W
R442	1-249-417-11	CARBON	1K 5% 1/4W	R497	1-215-421-00	METAL	1K 1% 1/6W
R443	1-249-423-11	CARBON	3.3K 5% 1/4W	R498	1-249-421-11	CARBON	2.2K 5% 1/4W
R444	1-249-417-11	CARBON	1K 5% 1/4W	R499	1-249-421-11	CARBON	2.2K 5% 1/4W
R445	1-249-435-11	CARBON	33K 5% 1/4W	R500	1-249-417-11	CARBON	1K 5% 1/4W
R446	1-249-429-11	CARBON	10K 5% 1/4W	R501	1-249-418-11	CARBON	1.2K 5% 1/4W
R449	1-249-435-11	CARBON	33K 5% 1/4W	R502	1-249-417-11	CARBON	1K 5% 1/4W
R450	1-249-431-11	CARBON	15K 5% 1/4W	R503	1-249-429-11	CARBON	10K 5% 1/4W
R451	1-249-417-11	CARBON	1K 5% 1/4W	R504	1-249-431-11	CARBON	15K 5% 1/4W
R452	1-249-417-11	CARBON	1K 5% 1/4W	R505	1-249-427-11	CARBON	6.8K 5% 1/4W
R453	1-249-417-11	CARBON	1K 5% 1/4W	R506	1-249-427-11	CARBON	6.8K 5% 1/4W
R454	1-249-413-11	CARBON	470 5% 1/4W	R507	1-249-431-11	CARBON	15K 5% 1/4W
R455	1-249-417-11	CARBON	1K 5% 1/4W	R508	1-249-417-11	CARBON	1K 5% 1/4W
R456	1-249-417-11	CARBON	1K 5% 1/4W	R509	1-249-417-11	CARBON	1K 5% 1/4W
R457	1-249-413-11	CARBON	470 5% 1/4W	R510	1-249-429-11	CARBON	10K 5% 1/4W
R458	1-249-413-11	CARBON	470 5% 1/4W	R511	1-249-423-11	CARBON	3.3K 5% 1/4W
R459	1-249-417-11	CARBON	1K 5% 1/4W	R512	1-249-413-11	CARBON	470 5% 1/4W
R460	1-249-435-11	CARBON	33K 5% 1/4W	R513	1-249-413-11	CARBON	470 5% 1/4W
R461	1-249-431-11	CARBON	15K 5% 1/4W	R514	1-249-417-11	CARBON	1K 5% 1/4W
R462	1-249-411-11	CARBON	330 5% 1/4W	R515	1-249-411-11	CARBON	330 5% 1/4W
R463	1-249-415-11	CARBON	680 5% 1/4W	R516	1-249-421-11	CARBON	2.2K 5% 1/4W
R464	1-249-417-11	CARBON	1K 5% 1/4W	R517	1-249-421-11	CARBON	2.2K 5% 1/4W
R465	1-249-423-11	CARBON	3.3K 5% 1/4W	R518	1-249-431-11	CARBON	15K 5% 1/4W
R466	1-249-413-11	CARBON	470 5% 1/4W	R519	1-249-427-11	CARBON	6.8K 5% 1/4W
R467	1-249-421-11	CARBON	2.2K 5% 1/4W	R520	1-249-408-11	CARBON	180 5% 1/4W
R468	1-249-421-11	CARBON	2.2K 5% 1/4W	R521	1-249-423-11	CARBON	3.3K 5% 1/4W
R469	1-249-431-11	CARBON	15K 5% 1/4W	R522	1-249-413-11	CARBON	470 5% 1/4W
R470	1-249-429-11	CARBON	10K 5% 1/4W	R525	1-249-413-11	CARBON	470 5% 1/4W
R471	1-249-431-11	CARBON	15K 5% 1/4W	R526	1-249-421-11	CARBON	2.2K 5% 1/4W
R472	1-249-425-11	CARBON	4.7K 5% 1/4W	R527	1-249-417-11	CARBON	1K 5% 1/4W
R473	1-249-419-11	CARBON	1.5K 5% 1/4W	R530	1-249-413-11	CARBON	470 5% 1/4W

When indicating parts by reference number, please include the board name.

WF-1

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WF-1

Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
C252	1-161-379-00	CERAMIC	0.01MF 30% 16V	C645	1-124-902-00	ELECT	0.47MF 20% 50V
C307	1-161-379-00	CERAMIC	0.01MF 30% 16V	C647	1-123-875-11	ELECT	10MF 20% 50V
C308	1-123-875-11	ELECT	10MF 20% 50V	C648	1-124-902-00	ELECT	0.47MF 20% 50V
C335	1-161-379-00	CERAMIC	0.01MF 30% 16V	C651	1-124-464-11	ELECT	0.22MF 20% 50V
C336	1-123-875-11	ELECT	10MF 20% 50V	C655	1-124-902-00	ELECT	0.47MF 20% 50V
C401	1-161-379-00	CERAMIC	0.01MF 30% 16V	C657	1-123-875-11	ELECT	10MF 20% 50V
C402	1-123-875-11	ELECT	10MF 20% 50V	C658	1-124-902-00	ELECT	0.47MF 20% 50V
C403	1-161-379-00	CERAMIC	0.01MF 30% 16V	C660	1-124-120-11	ELECT	220MF 20% 16V
C404	1-123-875-11	ELECT	10MF 20% 50V	C661	1-124-464-11	ELECT	0.22MF 20% 50V
C405	1-161-379-00	CERAMIC	0.01MF 30% 16V	C662	1-124-464-11	ELECT	0.22MF 20% 50V
C501	1-124-477-11	ELECT	47MF 20% 16V	C663	1-102-963-00	CERAMIC	33PF 5% 50V
C502	1-124-477-11	ELECT	47MF 20% 16V	C666	1-161-379-00	CERAMIC	0.01MF 30% 16V
C503	1-123-875-11	ELECT	10MF 20% 50V	C667	1-124-477-11	ELECT	47MF 20% 16V
C504	1-161-379-00	CERAMIC	0.01MF 30% 16V	C668	1-124-477-11	ELECT	47MF 20% 16V
C505	1-123-875-11	ELECT	10MF 20% 50V	C669	1-123-875-11	ELECT	10MF 20% 50V
C506	1-161-379-00	CERAMIC	0.01MF 30% 16V	C670	1-161-379-00	CERAMIC	0.01MF 30% 16V
C507	1-123-875-11	ELECT	10MF 20% 50V	C671	1-123-875-11	ELECT	10MF 20% 50V
C508	1-161-379-00	CERAMIC	0.01MF 30% 16V	C672	1-161-379-00	CERAMIC	0.01MF 30% 16V
C509	1-124-477-11	ELECT	47MF 20% 16V	C673	1-123-875-11	ELECT	10MF 20% 50V
C510	1-123-875-11	ELECT	10MF 20% 50V	C674	1-161-379-00	CERAMIC	0.01MF 30% 16V
C511	1-123-875-11	ELECT	10MF 20% 50V	C675	1-123-875-11	ELECT	10MF 20% 50V
C512	1-123-875-11	ELECT	10MF 20% 50V	C676	1-161-379-00	CERAMIC	0.01MF 30% 16V
C513	1-161-051-00	CERAMIC	0.01MF 10% 25V	C680	1-102-973-00	CERAMIC	100PF 5% 50V
C601	1-124-464-11	ELECT	0.22MF 20% 50V	C681	1-102-973-00	CERAMIC	100PF 5% 50V
C602	1-123-875-11	ELECT	10MF 20% 50V	C682	1-102-951-00	CERAMIC	15PF 5% 50V
C603	1-123-875-11	ELECT	10MF 20% 50V	C800	1-102-961-00	CERAMIC	27PF 5% 50V
C604	1-124-443-00	ELECT	100MF 20% 10V	C803	1-161-379-00	CERAMIC	0.01MF 30% 16V
C605	1-161-379-00	CERAMIC	0.01MF 30% 16V	C813	1-126-101-11	ELECT	100MF 20% 16V
C606	1-161-379-00	CERAMIC	0.01MF 30% 16V	C814	1-161-379-00	CERAMIC	0.01MF 30% 16V
C607	1-161-379-00	CERAMIC	0.01MF 30% 16V	C815	1-126-233-11	ELECT	22MF 20% 25V
C608	1-161-379-00	CERAMIC	0.01MF 30% 16V	C816	1-124-443-00	ELECT	100MF 20% 10V
C609	1-124-443-00	ELECT	100MF 20% 10V	C817	1-124-477-11	ELECT	47MF 20% 16V
C610	1-124-443-00	ELECT	100MF 20% 10V	C818	1-123-875-11	ELECT	10MF 20% 50V
C611	1-124-443-00	ELECT	100MF 20% 10V	C819	1-123-875-11	ELECT	10MF 20% 50V
C614	1-124-902-00	ELECT	0.47MF 20% 50V	C820	1-124-473-11	ELECT	1000MF 20% 10V
C616	1-123-875-11	ELECT	10MF 20% 50V	C821	1-124-473-11	ELECT	1000MF 20% 10V
C617	1-124-902-00	ELECT	0.47MF 20% 50V	C822	1-124-902-00	ELECT	0.47MF 20% 50V
C619	1-123-875-11	ELECT	10MF 20% 50V	C823	1-124-902-00	ELECT	0.47MF 20% 50V
C620	1-124-464-11	ELECT	0.22MF 20% 50V	C824	1-124-499-11	ELECT	1MF 20% 50V
C622	1-123-875-11	ELECT	10MF 20% 50V	C825	1-124-499-11	ELECT	1MF 20% 50V
C623	1-124-902-00	ELECT	0.47MF 20% 50V	C828	1-124-902-00	ELECT	0.47MF 20% 50V
C625	1-123-875-11	ELECT	10MF 20% 50V	C829	1-124-902-00	ELECT	0.47MF 20% 50V
C628	1-124-902-00	ELECT	0.47MF 20% 50V	C830	1-161-379-00	CERAMIC	0.01MF 30% 16V
C630	1-123-875-11	ELECT	10MF 20% 50V	C831	1-124-119-00	ELECT	330MF 20% 16V
C634	1-124-499-11	ELECT	1MF 20% 50V	C832	1-161-379-00	CERAMIC	0.01MF 30% 16V
C635	1-161-379-00	CERAMIC	0.01MF 30% 16V	C833	1-126-101-11	ELECT	100MF 20% 16V
C636	1-161-379-00	CERAMIC	0.01MF 30% 16V	C841	1-123-875-11	ELECT	10MF 20% 50V
C637	1-161-379-00	CERAMIC	0.01MF 30% 16V	C926	1-123-875-11	ELECT	10MF 20% 50V
C638	1-161-379-00	CERAMIC	0.01MF 30% 16V	C927	1-124-902-00	ELECT	0.47MF 20% 50V
C639	1-124-443-00	ELECT	100MF 20% 10V	C962	1-126-101-11	ELECT	100MF 20% 16V
C640	1-124-443-00	ELECT	100MF 20% 10V	C991	1-102-959-00	CERAMIC	22PF 5% 50V
C641	1-162-851-11	CERAMIC	0.1MF 10% 16V	C992	1-124-499-11	ELECT	1MF 20% 50V
C643	1-161-379-00	CERAMIC	0.01MF 30% 16V	C993	1-161-379-00	CERAMIC	0.01MF 30% 16V

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[illegible]

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Ref.No	Part No.	Description
<u>TRANSISTOR</u>		
Q001	8-729-900-61	TRANSISTOR DTA114ES
Q002	8-729-900-61	TRANSISTOR DTA114ES
Q003	8-729-900-80	TRANSISTOR DTC114ES
Q201	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q202	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q203	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q204	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q205	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q206	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q207	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q208	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q209	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q210	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q211	8-729-173-38	TRANSISTOR 2SA733-K
Q212	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q250	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q251	8-729-173-38	TRANSISTOR 2SA733-K
Q252	8-729-173-38	TRANSISTOR 2SA733-K
Q253	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q254	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q501	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q502	8-729-900-80	TRANSISTOR DTC114ES
Q503	8-729-900-61	TRANSISTOR DTA114ES
Q504	8-729-900-80	TRANSISTOR DTC114ES
Q505	8-729-900-61	TRANSISTOR DTA114ES
Q601	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q602	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q603	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q605	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q606	8-729-101-38	TRANSISTOR 2SC2785-E
Q607	8-729-101-38	TRANSISTOR 2SC2785-E
Q608	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q609	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q610	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q611	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q612	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q613	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q614	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q615	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q616	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q617	8-729-900-80	TRANSISTOR DTC114ES
Q618	8-729-101-38	TRANSISTOR 2SC2785-E
Q619	8-729-101-36	TRANSISTOR 2SC2785-H
Q624	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q625	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q626	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q627	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q632	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q633	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q635	8-729-119-78	TRANSISTOR 2SC2785-HFE
Q640	8-729-119-78	TRANSISTOR 2SC2785-HFE

Remark	Ref.No	Part No.	Description	Remark
	Q641	8-729-900-74	TRANSISTOR DTC143TS	
	Q643	8-729-173-38	TRANSISTOR 2SA733-K	
	Q644	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q645	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q646	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q647	8-729-173-38	TRANSISTOR 2SA733-K	
	Q648	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q649	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q701	8-729-900-74	TRANSISTOR DTC143TS	
	Q702	8-729-900-74	TRANSISTOR DTC143TS	
	Q805	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q806	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q807	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q808	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q900	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q901	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q991	8-729-173-38	TRANSISTOR 2SC733-K	
	Q992	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	<u>RESISTOR</u>			
	R001	1-249-429-11	CARBON 10K 5% 1/4W	
	R002	1-249-429-11	CARBON 10K 5% 1/4W	
	R003	1-249-421-11	CARBON 2.2K 5% 1/4W	
	R004	1-249-422-11	CARBON 2.7K 5% 1/4W	
	R005	1-249-421-11	CARBON 2.2K 5% 1/4W	
	R006	1-249-422-11	CARBON 2.7K 5% 1/4W	
	R007	1-249-429-11	CARBON 10K 5% 1/4W	
	R008	1-249-431-11	CARBON 15K 5% 1/4W	
	R009	1-249-417-11	CARBON 1K 5% 1/4W	
	R010	1-249-417-11	CARBON 1K 5% 1/4W	
	R201	1-249-429-11	CARBON 10K 5% 1/4W	
	R202	1-249-425-11	CARBON 4.7K 5% 1/4W	
	R203	1-249-413-11	CARBON 470 5% 1/4W	
	R204	1-249-413-11	CARBON 470 5% 1/4W	
	R205	1-249-417-11	CARBON 1K 5% 1/4W	
	R206	1-249-413-11	CARBON 470 5% 1/4W	
	R207	1-249-429-11	CARBON 10K 5% 1/4W	
	R208	1-249-425-11	CARBON 4.7K 5% 1/4W	
	R209	1-249-412-11	CARBON 390 5% 1/4W	
	R210	1-249-412-11	CARBON 390 5% 1/4W	
	R211	1-249-412-11	CARBON 390 5% 1/4W	
	R212	1-249-412-11	CARBON 390 5% 1/4W	
	R213	1-249-412-11	CARBON 390 5% 1/4W	
	R214	1-249-432-11	CARBON 18K 5% 1/4W	
	R215	1-249-428-11	CARBON 8.2K 5% 1/4W	
	R216	1-249-418-11	CARBON 1.2K 5% 1/4W	
	R217	1-249-412-11	CARBON 390 5% 1/4W	
	R218	1-249-409-11	CARBON 220 5% 1/4W	
	R219	1-249-413-11	CARBON 470 5% 1/4W	
	R220	1-249-416-11	CARBON 820 5% 1/4W	
	R221	1-249-411-11	CARBON 330 5% 1/4W	
	R222	1-249-413-11	CARBON 470 5% 1/4W	
	R223	1-249-411-11	CARBON 330 5% 1/4W	

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
R224	1-249-417-11	CARBON	1K 5% 1/4W	R514	1-249-435-11	CARBON	33K 5% 1/4W
R225	1-249-423-11	CARBON	3.3K 5% 1/4W	R515	1-249-441-11	CARBON	100K 5% 1/4W
R226	1-249-420-11	CARBON	1.8K 5% 1/4W	R516	1-249-429-11	CARBON	10K 5% 1/4W
R227	1-249-417-11	CARBON	1K 5% 1/4W	R517	1-249-431-11	CARBON	15K 5% 1/4W
R228	1-249-419-11	CARBON	1.5K 5% 1/4W	R518	1-249-441-11	CARBON	100K 5% 1/4W
R229	1-249-417-11	CARBON	1K 5% 1/4W	R519	1-249-425-11	CARBON	4.7K 5% 1/4W
R230	1-249-418-11	CARBON	1.2K 5% 1/4W	R520	1-249-433-11	CARBON	22K 5% 1/4W
R232	1-249-425-11	CARBON	4.7K 5% 1/4W	R521	1-249-417-11	CARBON	1K 5% 1/4W
R233	1-249-413-11	CARBON	470 5% 1/4W	R523	1-249-441-11	CARBON	100K 5% 1/4W
R234	1-249-413-11	CARBON	470 5% 1/4W	R524	1-249-429-11	CARBON	10K 5% 1/4W
R235	1-249-406-11	CARBON	120 5% 1/4W	R525	1-249-433-11	CARBON	22K 5% 1/4W
R237	1-249-413-11	CARBON	470 5% 1/4W	R526	1-249-409-11	CARBON	220 5% 1/4W
R238	1-249-411-11	CARBON	330 5% 1/4W	R527	1-249-433-11	CARBON	22K 5% 1/4W
R240	1-249-413-11	CARBON	470 5% 1/4W	R528	1-247-891-00	CARBON	330K 5% 1/4W
R251	1-249-435-11	CARBON	33K 5% 1/4W	R529	1-249-420-11	CARBON	1.8K 5% 1/4W
R252	1-249-429-11	CARBON	10K 5% 1/4W	R582	1-249-425-11	CARBON	4.7K 5% 1/4W
R253	1-249-417-11	CARBON	1K 5% 1/4W	R601	1-249-426-11	CARBON	5.6K 5% 1/4W
R254	1-249-413-11	CARBON	470 5% 1/4W	R602	1-249-433-11	CARBON	22K 5% 1/4W
R255	1-249-413-11	CARBON	470 5% 1/4W	R603	1-249-417-11	CARBON	1K 5% 1/4W
R256	1-249-417-11	CARBON	1K 5% 1/4W	R604	1-249-417-11	CARBON	1K 5% 1/4W
R257	1-249-413-11	CARBON	470 5% 1/4W	R605	1-249-417-11	CARBON	1K 5% 1/4W
R258	1-249-421-11	CARBON	2.2K 5% 1/4W	R606	1-249-421-11	CARBON	2.2K 5% 1/4W
R259	1-249-421-11	CARBON	2.2K 5% 1/4W	R607	1-249-416-11	CARBON	820 5% 1/4W
R260	1-249-429-11	CARBON	10K 5% 1/4W	R608	1-249-417-11	CARBON	1K 5% 1/4W
R261	1-249-429-11	CARBON	10K 5% 1/4W	R609	1-249-421-11	CARBON	2.2K 5% 1/4W
R262	1-249-421-11	CARBON	2.2K 5% 1/4W	R611	1-249-411-11	CARBON	330 5% 1/4W
R401	1-249-428-11	CARBON	8.2K 5% 1/4W	R612	1-249-409-11	CARBON	220 5% 1/4W
R402	1-249-422-11	CARBON	2.7K 5% 1/4W	R614	1-249-416-11	CARBON	820 5% 1/4W
R403	1-249-419-11	CARBON	1.5K 5% 1/4W	R615	1-249-417-11	CARBON	1K 5% 1/4W
R404	1-249-419-11	CARBON	1.5K 5% 1/4W	R620	1-249-417-11	CARBON	1K 5% 1/4W
R405	1-249-422-11	CARBON	2.7K 5% 1/4W	R621	1-249-413-11	CARBON	470 5% 1/4W
R406	1-249-427-11	CARBON	6.8K 5% 1/4W	R622	1-249-417-11	CARBON	1K 5% 1/4W
R407	1-249-429-11	CARBON	10K 5% 1/4W	R623	1-249-413-11	CARBON	470 5% 1/4W
R408	1-247-872-11	CARBON	51K 5% 1/4W	R624	1-215-437-00	METAL	4.7K 1% 1/6W
R409	1-249-429-11	CARBON	10K 5% 1/4W	R625	1-249-433-11	CARBON	22K 5% 1/4W
R410	1-249-432-11	CARBON	18K 5% 1/4W	R626	1-249-437-11	CARBON	47K 5% 1/4W
R411	1-249-422-11	CARBON	2.7K 5% 1/4W	R629	1-215-437-00	METAL	4.7K 1% 1/6W
R412	1-249-429-11	CARBON	10K 5% 1/4W	R630	1-249-417-11	CARBON	1K 5% 1/4W
R413	1-247-872-11	CARBON	51K 5% 1/4W	R631	1-249-415-11	CARBON	680 5% 1/4W
R414	1-249-431-11	CARBON	15K 5% 1/4W	R632	1-249-413-11	CARBON	470 5% 1/4W
R415	1-249-439-11	CARBON	68K 5% 1/4W	R633	1-249-433-11	CARBON	22K 5% 1/4W
R416	1-249-413-11	CARBON	470 5% 1/4W	R634	1-249-413-11	CARBON	470 5% 1/4W
R501	1-249-428-11	CARBON	8.2K 5% 1/4W	R635	1-249-433-11	CARBON	22K 5% 1/4W
R502	1-249-432-11	CARBON	18K 5% 1/4W	R636	1-249-426-11	CARBON	5.6K 5% 1/4W
R503	1-249-435-11	CARBON	33K 5% 1/4W	R637	1-249-426-11	CARBON	5.6K 5% 1/4W
R505	1-249-425-11	CARBON	4.7K 5% 1/4W	R638	1-249-421-11	CARBON	2.2K 5% 1/4W
R507	1-249-435-11	CARBON	33K 5% 1/4W	R639	1-249-425-11	CARBON	4.7K 5% 1/4W
R508	1-249-435-11	CARBON	33K 5% 1/4W	R640	1-249-433-11	CARBON	22K 5% 1/4W
R509	1-249-428-11	CARBON	8.2K 5% 1/4W	R641	1-249-437-11	CARBON	47K 5% 1/4W
R510	1-249-428-11	CARBON	8.2K 5% 1/4W	R644	1-249-425-11	CARBON	4.7K 5% 1/4W
R511	1-249-429-11	CARBON	10K 5% 1/4W	R645	1-249-415-11	CARBON	680 5% 1/4W
R512	1-249-435-11	CARBON	33K 5% 1/4W	R647	1-249-433-11	CARBON	22K 5% 1/4W
R513	1-249-429-11	CARBON	10K 5% 1/4W	R648	1-249-413-11	CARBON	470 5% 1/4W

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
R649	1-249-433-11	CARBON	22K 5% 1/4W	R733	1-249-413-11	CARBON	470 5% 1/4W
R650	1-249-426-11	CARBON	5.6K 5% 1/4W	R734	1-249-417-11	CARBON	1K 5% 1/4W
R651	1-249-426-11	CARBON	5.6K 5% 1/4W	R735	1-249-417-11	CARBON	1K 5% 1/4W
R652	1-249-421-11	CARBON	2.2K 5% 1/4W	R736	1-249-413-11	CARBON	470 5% 1/4W
R654	1-249-417-11	CARBON	1K 5% 1/4W	R737	1-249-421-11	CARBON	2.2K 5% 1/4W
R655	1-249-425-11	CARBON	4.7K 5% 1/4W	R740	1-249-432-11	CARBON	18K 5% 1/4W
R656	1-249-433-11	CARBON	22K 5% 1/4W	R743	1-249-433-11	CARBON	22K 5% 1/4W
R657	1-249-437-11	CARBON	47K 5% 1/4W	R744	1-249-429-11	CARBON	10K 5% 1/4W
R659	1-249-417-11	CARBON	1K 5% 1/4W	R745	1-249-417-11	CARBON	1K 5% 1/4W
R660	1-249-415-11	CARBON	680 5% 1/4W	R746	1-249-413-11	CARBON	470 5% 1/4W
R672	1-249-421-11	CARBON	2.2K 5% 1/4W	R747	1-249-417-11	CARBON	1K 5% 1/4W
R673	1-249-421-11	CARBON	2.2K 5% 1/4W	R748	1-249-413-11	CARBON	470 5% 1/4W
R674	1-249-416-11	CARBON	820 5% 1/4W	R749	1-249-413-11	CARBON	470 5% 1/4W
R675	1-249-421-11	CARBON	2.2K 5% 1/4W	R750	1-249-421-11	CARBON	2.2K 5% 1/4W
R676	1-249-411-11	CARBON	330 5% 1/4W	R751	1-249-417-11	CARBON	1K 5% 1/4W
R677	1-249-417-11	CARBON	1K 5% 1/4W	R752	1-249-417-11	CARBON	1K 5% 1/4W
R679	1-249-413-11	CARBON	470 5% 1/4W	R753	1-249-413-11	CARBON	470 5% 1/4W
R680	1-249-409-11	CARBON	220 5% 1/4W	R754	1-249-421-11	CARBON	2.2K 5% 1/4W
R682	1-249-416-11	CARBON	820 5% 1/4W	R755	1-249-429-11	CARBON	10K 5% 1/4W
R684	1-249-421-11	CARBON	2.2K 5% 1/4W	R760	1-249-429-11	CARBON	10K 5% 1/4W
R686	1-249-421-11	CARBON	2.2K 5% 1/4W	R801	1-249-417-11	CARBON	1K 5% 1/4W
R687	1-249-421-11	CARBON	2.2K 5% 1/4W	R802	1-249-414-11	CARBON	560 5% 1/4W
R688	1-249-431-11	CARBON	15K 5% 1/4W	R810	1-249-429-11	CARBON	10K 5% 1/4W
R689	1-249-429-11	CARBON	10K 5% 1/4W	R811	1-249-410-11	CARBON	270 5% 1/4W
R690	1-249-417-11	CARBON	1K 5% 1/4W	R812	1-249-413-11	CARBON	470 5% 1/4W
R691	1-249-413-11	CARBON	470 5% 1/4W	R813	1-249-416-11	CARBON	820 5% 1/4W
R692	1-249-417-11	CARBON	1K 5% 1/4W	R814	1-249-417-11	CARBON	1K 5% 1/4W
R694	1-249-433-11	CARBON	22K 5% 1/4W	R815	1-249-429-11	CARBON	10K 5% 1/4W
R695	1-249-437-11	CARBON	47K 5% 1/4W	R816	1-249-429-11	CARBON	10K 5% 1/4W
R696	1-249-429-11	CARBON	10K 5% 1/4W	R817	1-249-428-11	CARBON	8.2K 5% 1/4W
R697	1-249-426-11	CARBON	5.6K 5% 1/4W	R819	1-249-417-11	CARBON	1K 5% 1/4W
R698	1-249-423-11	CARBON	3.3K 5% 1/4W	R821	1-249-429-11	CARBON	10K 5% 1/4W
R700	1-249-429-11	CARBON	10K 5% 1/4W	R822	1-249-429-11	CARBON	10K 5% 1/4W
R702	1-249-413-11	CARBON	470 5% 1/4W	R823	1-249-429-11	CARBON	10K 5% 1/4W
R706	1-249-421-11	CARBON	2.2K 5% 1/4W	R827	1-249-423-11	CARBON	3.3K 5% 1/4W
R707	1-249-425-11	CARBON	4.7K 5% 1/4W	R828	1-249-423-11	CARBON	3.3K 5% 1/4W
R708	1-249-433-11	CARBON	22K 5% 1/4W	R831	1-249-423-11	CARBON	3.3K 5% 1/4W
R709	1-249-437-11	CARBON	47K 5% 1/4W	R832	1-249-423-11	CARBON	3.3K 5% 1/4W
R715	1-249-413-11	CARBON	470 5% 1/4W	R833	1-247-804-11	CARBON	75 5% 1/4W
R717	1-249-421-11	CARBON	2.2K 5% 1/4W	R834	1-247-804-11	CARBON	75 5% 1/4W
R719	1-249-433-11	CARBON	22K 5% 1/4W	R835	1-247-804-11	CARBON	75 5% 1/4W
R720	1-249-437-11	CARBON	47K 5% 1/4W	R836	1-247-804-11	CARBON	75 5% 1/4W
R721	1-249-429-11	CARBON	10K 5% 1/4W	R850	1-249-417-11	CARBON	1K 5% 1/4W
R722	1-249-426-11	CARBON	5.6K 5% 1/4W	R851	1-249-433-11	CARBON	22K 5% 1/4W
R723	1-249-423-11	CARBON	3.3K 5% 1/4W	R852	1-249-433-11	CARBON	22K 5% 1/4W
R725	1-249-429-11	CARBON	10K 5% 1/4W	R853	1-249-426-11	CARBON	5.6K 5% 1/4W
R726	1-249-433-11	CARBON	22K 5% 1/4W	R854	1-249-426-11	CARBON	5.6K 5% 1/4W
R727	1-249-429-11	CARBON	10K 5% 1/4W	R856	1-249-429-11	CARBON	10K 5% 1/4W
R728	1-249-417-11	CARBON	1K 5% 1/4W	R857	1-249-429-11	CARBON	10K 5% 1/4W
R729	1-249-413-11	CARBON	470 5% 1/4W	R858	1-249-429-11	CARBON	10K 5% 1/4W
R730	1-249-417-11	CARBON	1K 5% 1/4W	R906	1-249-424-11	CARBON	3.9K 5% 1/4W
R731	1-249-421-11	CARBON	2.2K 5% 1/4W	R991	1-249-413-11	CARBON	470 5% 1/4W
R732	1-249-413-11	CARBON	470 5% 1/4W	R992	1-249-417-11	CARBON	1K 5% 1/4W

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Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
R993	1-249-417-11	CARBON 1K 5% 1/4W		C123	1-102-074-00	CERAMIC 0.001MF 10% 50V	
R994	1-249-433-11	CARBON 22K 5% 1/4W		C124	1-130-477-00	FILM 0.0033MF 5% 50V	
R995	1-247-883-00	CARBON 150K 5% 1/4W		C125	1-130-489-00	MYLAR 0.033MF 5% 50V	
R996	1-249-413-11	CARBON 470 5% 1/4W		C127	1-124-589-11	ELECT 47MF 20% 16V	
R997	1-249-421-11	CARBON 2.2K 5% 1/4W		C128	1-126-163-11	ELECT 4.7MF 20% 50V	
VARIABLE RESISTOR				C129	1-136-155-00	MYLAR 0.015MF 10% 50V	
RV001	1-228-994-00	RES, ADJ, CARBON 10K		C130	1-136-161-00	MYLAR 0.047MF 10% 50V	
RV201	1-228-993-00	RES, ADJ, CARBON 4.7K		C131	1-126-163-11	ELECT 4.7MF 20% 50V	
RV203	1-228-994-00	RES, ADJ, CARBON 10K		C132	1-136-155-00	MYLAR 0.015MF 10% 50V	
RV204	1-228-991-00	RES, ADJ, CARBON 2.2K		C133	1-130-473-00	MYLAR 0.0015MF 10% 50V	
RV205	1-228-991-00	RES, ADJ, CARBON 2.2K		C134	1-130-477-00	FILM 0.0033MF 5% 50V	
RV601	1-228-997-00	RES, ADJ, CARBON 100K		C135	1-126-176-11	ELECT 220MF 20% 10V	
RV602	1-228-990-00	RES, ADJ, CARBON 1K		C136	1-161-379-00	CERAMIC 0.01MF 30% 16V	
RV603	1-228-991-00	RES, ADJ, CARBON 2.2K		C138	1-130-481-00	MYLAR 0.0068MF 10% 50V	
RV604	1-228-991-00	RES, ADJ, CARBON 2.2K		C139	1-130-479-00	MYLAR 0.0047MF 10% 50V	
RV800	1-228-991-00	RES, ADJ, CARBON 2.2K		C141	1-102-959-00	CERAMIC 22PF 5% 50V	
RV802	1-228-991-00	RES, ADJ, CARBON 2.2K		C142	1-102-963-00	CERAMIC 33PF 5% 50V	
RV991	1-228-990-00	RES, ADJ, CARBON 1K		C145	1-161-379-00	CERAMIC 0.01MF 30% 16V	
RELAY				C146	1-136-157-00	MYLAR 0.022MF 10% 50V	
RY800	1-515-529-11	RELAY		C152	1-102-978-00	CERAMIC 220PF 5% 50V	
*****				C153	1-102-978-00	CERAMIC 220PF 5% 50V	
*A-7061-750-A CA-16 BOARD, COMPLETE				C154	1-124-589-11	ELECT 47MF 20% 10V	
*****				C155	1-124-589-11	ELECT 47MF 20% 10V	
*2-352-113-01 CASE, SHIELD				C156	1-161-379-00	CERAMIC 0.01MF 30% 16V	
*2-352-114-01 PLATE (A), SHIELD				C158	1-102-114-00	CERAMIC 470PF 10% 50V	
*2-352-115-01 LID, SHIELD CASE				C159	1-130-479-00	MYLAR 0.0047MF 10% 50V	
CAPACITOR				C160	1-102-114-00	CERAMIC 470PF 10% 50V	
C101	1-124-584-00	ELECT 100MF 20% 10V		C182	1-161-379-00	CERAMIC 0.01MF 30% 16V	
C102	1-124-584-00	ELECT 100MF 20% 10V		C191	1-124-589-11	ELECT 47MF 20% 10V	
C103	1-124-584-00	ELECT 100MF 20% 10V		C192	1-124-589-11	ELECT 47MF 20% 10V	
C104	1-102-973-00	CERAMIC 100PF 5% 50V		C205	1-124-584-00	ELECT 100MF 20% 10V	
C105	1-102-973-00	CERAMIC 100PF 5% 50V		C206	1-161-379-00	CERAMIC 0.01MF 30% 16V	
C106	1-124-438-00	ELECT 1MF 20% 50V		C601	1-124-438-00	ELECT 1MF 20% 50V	
C107	1-162-851-11	CERAMIC 0.1MF 10% 16V		C602	1-123-875-11	ELECT 10MF 20% 50V	
C108	1-162-851-11	CERAMIC 0.1MF 10% 16V		C604	1-126-101-11	ELECT 100MF 20% 16V	
C109	1-162-851-11	CERAMIC 0.1MF 10% 16V		C605	1-102-973-00	CERAMIC 100PF 5% 50V	
C110	1-130-471-00	MYLAR 0.001MF 5% 50V		C608	1-102-973-00	CERAMIC 100PF 5% 50V	
C111	1-102-816-00	CERAMIC 120PF 5% 50V		C609	1-161-379-00	CERAMIC 0.01MF 30% 16V	
C112	1-130-471-00	MYLAR 0.001MF 5% 50V		C610	1-123-875-11	ELECT 10MF 20% 50V	
C113	1-124-584-00	ELECT 100MF 20% 10V		C612	1-124-598-11	ELECT 22MF 20% 25V	
C114	1-124-584-00	ELECT 100MF 20% 10V		C613	1-126-163-11	ELECT 4.7MF 20% 50V	
C115	1-102-973-00	CERAMIC 100PF 5% 50V		C614	1-123-875-11	ELECT 10MF 20% 50V	
C117	1-161-379-00	CERAMIC 0.01MF 30% 16V		C615	1-123-875-11	ELECT 10MF 20% 50V	
C118	1-161-379-00	CERAMIC 0.01MF 30% 16V		C616	1-126-101-11	ELECT 100MF 20% 16V	
C119	1-162-851-11	CERAMIC 0.1MF 10% 16V		C617	1-123-875-11	ELECT 10MF 20% 50V	
C120	1-162-851-11	CERAMIC 0.1MF 10% 16V		C618	1-123-875-11	ELECT 10MF 20% 50V	
C121	1-102-074-00	CERAMIC 0.001MF 10% 50V		C619	1-123-875-11	ELECT 10MF 20% 50V	
C122	1-102-074-00	CERAMIC 0.001MF 10% 50V		C620	1-123-875-11	ELECT 10MF 20% 50V	
				C621	1-123-875-11	ELECT 10MF 20% 50V	
				C622	1-123-875-11	ELECT 10MF 20% 50V	
				C623	1-126-163-11	ELECT 4.7MF 20% 50V	
				C624	1-124-598-11	ELECT 22MF 20% 25V	
				C625	1-123-875-11	ELECT 10MF 20% 50V	

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description			Remark	Ref.No	Part No.	Description			Remark
C626	1-123-875-11	ELECT	10MF	20%	50V	C723	1-102-115-00	CERAMIC	560PF	10%	50V
C627	1-161-379-00	CERAMIC	0.01MF	30%	16V	C724	1-161-379-00	CERAMIC	0.01MF	30%	16V
C628	1-123-875-11	ELECT	10MF	20%	50V	C725	1-161-379-00	CERAMIC	0.01MF	30%	16V
C629	1-123-875-11	ELECT	10MF	20%	50V	C726	1-124-584-00	ELECT	100MF	20%	10V
C630	1-123-875-11	ELECT	10MF	20%	50V	C727	1-161-379-00	CERAMIC	0.01MF	30%	16V
C631	1-102-978-00	CERAMIC	220PF	5%	50V	C730	1-101-880-00	CERAMIC	47PF	5%	50V
C632	1-123-875-11	ELECT	10MF	20%	50V	C731	1-102-976-00	CERAMIC	180PF	5%	50V
C633	1-102-978-00	CERAMIC	220PF	5%	50V	C732	1-102-973-00	CERAMIC	100PF	5%	50V
C635	1-161-379-00	CERAMIC	0.01MF	30%	16V	C733	1-102-947-00	CERAMIC	10PF	0.5PF	50V
C636	1-123-875-11	ELECT	10MF	20%	50V	C734	1-161-379-00	CERAMIC	0.01MF	30%	16V
C637	1-124-598-11	ELECT	22MF	20%	25V	C735	1-161-379-00	CERAMIC	0.01MF	30%	16V
C638	1-126-163-11	ELECT	4.7MF	20%	50V	C736	1-131-368-00	TANTALUM	3.3MF	10%	16V
C640	1-124-584-00	ELECT	100MF	20%	10V	C737	1-124-589-11	ELECT	47MF	20%	10V
C641	1-123-875-11	ELECT	10MF	20%	50V	C738	1-123-875-11	ELECT	10MF	20%	50V
C642	1-123-875-11	ELECT	10MF	20%	50V	C739	1-162-851-11	CERAMIC	0.1MF	10%	16V
C644	1-123-875-11	ELECT	10MF	20%	50V	C740	1-162-851-11	CERAMIC	0.1MF	10%	16V
C645	1-124-598-11	ELECT	22MF	20%	25V	C741	1-162-851-11	CERAMIC	0.1MF	10%	16V
C646	1-126-163-11	ELECT	4.7MF	20%	50V	C742	1-124-584-00	ELECT	100MF	20%	10V
C647	1-123-875-11	ELECT	10MF	20%	50V	C743	1-161-379-00	CERAMIC	0.01MF	30%	16V
C648	1-123-875-11	ELECT	10MF	20%	50V	C744	1-161-379-00	CERAMIC	0.01MF	30%	16V
C649	1-123-875-11	ELECT	10MF	20%	50V	C745	1-124-589-11	ELECT	47MF	20%	10V
C650	1-123-875-11	ELECT	10MF	20%	50V	C746	1-161-379-00	CERAMIC	0.01MF	30%	16V
C651	1-161-379-00	CERAMIC	0.01MF	30%	16V	C747	1-102-971-00	CERAMIC	82PF	5%	50V
C652	1-123-875-11	ELECT	10MF	20%	50V	C748	1-102-953-00	CERAMIC	18PF	5%	50V
C653	1-162-851-11	CERAMIC	0.1MF	10%	16V	C749	1-161-379-00	CERAMIC	0.01MF	30%	16V
C654	1-126-176-11	ELECT	220MF	20%	10V	C750	1-161-379-00	CERAMIC	0.01MF	30%	16V
C655	1-162-851-11	CERAMIC	0.1MF	10%	16V	C751	1-124-589-11	ELECT	47MF	20%	10V
C656	1-126-176-11	ELECT	220MF	20%	10V	C752	1-161-379-00	CERAMIC	0.01MF	30%	16V
C657	1-161-379-00	CERAMIC	0.01MF	30%	16V	C753	1-124-589-11	ELECT	47MF	20%	10V
C658	1-123-875-11	ELECT	10MF	20%	50V	C754	1-161-379-00	CERAMIC	0.01MF	30%	16V
C659	1-123-875-11	ELECT	10MF	20%	50V	C755	1-161-379-00	CERAMIC	0.01MF	30%	16V
C661	1-123-875-11	ELECT	10MF	20%	50V	C756	1-124-589-11	ELECT	47MF	20%	10V
C664	1-126-176-11	ELECT	220MF	20%	10V	C757	1-161-379-00	CERAMIC	0.01MF	30%	16V
C670	1-161-051-00	CERAMIC	0.01MF	10%	25V	C758	1-161-379-00	CERAMIC	0.01MF	30%	16V
C699	1-161-772-11	CERAMIC	0.1MF	10%	25V	C759	1-161-379-00	CERAMIC	0.01MF	30%	16V
C701	1-124-584-00	ELECT	100MF	20%	10V	C760	1-124-589-11	ELECT	47MF	20%	10V
C702	1-161-379-00	CERAMIC	0.01MF	30%	16V	C761	1-161-379-00	CERAMIC	0.01MF	30%	16V
C703	1-101-361-00	CERAMIC	150PF	5%	50V	C762	1-102-106-00	CERAMIC	100PF	10%	50V
C704	1-101-361-00	CERAMIC	150PF	5%	50V	C763	1-102-978-00	CERAMIC	220PF	5%	50V
C708	1-131-347-00	TANTALUM	1MF	10%	25V	C764	1-102-978-00	CERAMIC	220PF	5%	50V
C709	1-124-438-00	ELECT	1MF	20%	50V	C765	1-102-973-00	CERAMIC	100PF	5%	50V
C710	1-161-379-00	CERAMIC	0.01MF	30%	16V	C766	1-161-379-00	CERAMIC	0.01MF	30%	16V
C711	1-161-379-00	CERAMIC	0.01MF	30%	16V	C767	1-161-051-00	CERAMIC	0.01MF	10%	25V
C712	1-124-261-00	ELECT	10MF	20%	50V	C768	1-124-589-11	ELECT	47MF	20%	16V
C713	1-131-499-91	TANTALUM	1.5MF	10%	20V	C769	1-161-379-00	CERAMIC	0.01MF	30%	16V
C714	1-124-438-00	ELECT	1MF	20%	50V	C770	1-161-379-00	CERAMIC	0.01MF	30%	16V
C715	1-102-816-00	CERAMIC	120PF	5%	50V	C772	1-161-379-00	CERAMIC	0.01MF	30%	16V
C716	1-130-468-00	MYLAR	560PF	5%	50V	C781	1-102-971-00	CERAMIC	82PF	5%	50V
C717	1-161-379-00	CERAMIC	0.01MF	30%	16V	C782	1-102-953-00	CERAMIC	18PF	5%	50V
C718	1-136-159-00	MYLAR	0.033MF	10%	50V	C783	1-162-851-11	CERAMIC	0.1MF	10%	16V
C719	1-130-477-00	MYLAR	0.0033MF	5%	50V	C801	1-126-101-11	ELECT	100MF	20%	16V
C720	1-124-442-00	ELECT	330MF	20%	6.3V	C802	1-124-584-00	ELECT	100MF	20%	10V
C721	1-136-153-00	MYLAR	0.01MF	10%	50V	C803	1-124-589-11	ELECT	47MF	20%	16V

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
C804	1-124-589-11	ELECT	47MF 20% 16V	C857	1-130-471-00	MYLAR	0.001MF 10% 50V
C805	1-124-261-00	ELECT	10MF 20% 50V	C858	1-124-261-00	ELECT	10MF 20% 50V
C806	1-101-888-00	CERAMIC	68PF 5% 50V	C859	1-124-261-00	ELECT	10MF 20% 50V
C807	1-130-479-00	MYLAR	0.0047MF 10% 50V	C860	1-124-438-00	ELECT	1MF 20% 50V
C808	1-124-584-00	ELECT	100MF 20% 10V	C861	1-124-261-00	ELECT	10MF 20% 50V
C809	1-161-379-00	CERAMIC	0.01MF 30% 16V	C862	1-136-155-00	MYLAR	0.015MF 10% 50V
C810	1-124-589-11	ELECT	47MF 20% 16V	C863	1-124-261-00	ELECT	10MF 20% 50V
C811	1-124-465-00	ELECT	0.47MF 20% 50V	C864	1-124-589-11	ELECT	47MF 20% 16V
C812	1-124-257-00	ELECT	2.2MF 20% 50V	C865	1-161-379-00	CERAMIC	0.01MF 30% 16V
C813	1-124-465-00	ELECT	0.47MF 20% 50V	C866	1-161-379-00	CERAMIC	0.01MF 30% 16V
C814	1-124-257-00	ELECT	2.2MF 20% 50V	C867	1-161-379-00	CERAMIC	0.01MF 30% 16V
C815	1-161-379-00	CERAMIC	0.01MF 30% 16V	C868	1-161-379-00	CERAMIC	0.01MF 30% 16V
C816	1-124-589-11	ELECT	47MF 20% 16V	C869	1-124-589-11	ELECT	47MF 20% 10V
C817	1-124-261-00	ELECT	10MF 20% 50V	C870	1-161-379-00	CERAMIC	0.01MF 30% 16V
C818	1-124-257-00	ELECT	2.2MF 20% 50V	C871	1-161-379-00	CERAMIC	0.01MF 30% 16V
C819	1-124-589-11	ELECT	47MF 20% 16V	C872	1-161-379-00	CERAMIC	0.01MF 30% 16V
C820	1-124-589-11	ELECT	47MF 20% 16V	C873	1-161-379-00	CERAMIC	0.01MF 30% 16V
C821	1-124-589-11	ELECT	47MF 20% 16V	C874	1-161-379-00	CERAMIC	0.01MF 30% 16V
C822	1-124-589-11	ELECT	47MF 20% 16V	C875	1-161-379-00	CERAMIC	0.01MF 30% 16V
C823	1-124-589-11	ELECT	47MF 20% 16V	C876	1-161-379-00	CERAMIC	0.01MF 30% 16V
C824	1-124-589-11	ELECT	47MF 20% 16V	C877	1-124-584-00	ELECT	100MF 20% 10V
C825	1-124-589-11	ELECT	47MF 20% 16V	C878	1-124-589-11	ELECT	47MF 20% 16V
C826	1-124-589-11	ELECT	47MF 20% 16V	C879	1-124-261-00	ELECT	10MF 20% 50V
C827	1-124-261-00	ELECT	10MF 20% 50V	C880	1-124-589-11	ELECT	47MF 20% 10V
C828	1-124-261-00	ELECT	10MF 20% 50V	C881	1-161-379-00	CERAMIC	0.01MF 30% 16V
C829	1-124-584-00	ELECT	100MF 20% 10V	C882	1-124-589-11	ELECT	47MF 20% 10V
C830	1-131-347-00	TANTALUM	1MF 10% 25V	C883	1-161-379-00	CERAMIC	0.01MF 30% 16V
C831	1-161-379-00	CERAMIC	0.01MF 30% 16V	C884	1-102-074-00	CERAMIC	0.001MF 10% 50V
C832	1-124-589-11	ELECT	47MF 20% 16V	C885	1-124-589-11	ELECT	47MF 20% 16V
C833	1-124-589-11	ELECT	47MF 20% 16V	C886	1-102-959-00	CERAMIC	22PF 5% 50V
C834	1-124-257-00	ELECT	2.2MF 20% 50V	C888	1-130-475-00	MYLAR	0.0022MF 10% 50V
C835	1-124-589-11	ELECT	47MF 20% 16V				
C836	1-124-257-00	ELECT	2.2MF 20% 50V				
C837	1-161-379-00	CERAMIC	0.01MF 30% 16V				
C838	1-124-589-11	ELECT	47MF 20% 16V				
C839	1-124-261-00	ELECT	10MF 20% 50V				
C840	1-124-257-00	ELECT	2.2MF 20% 50V				
C841	1-124-589-11	ELECT	47MF 20% 16V				
C842	1-124-589-11	ELECT	47MF 20% 16V				
C843	1-161-379-00	CERAMIC	0.01MF 30% 16V				
C844	1-124-589-11	ELECT	47MF 20% 16V				
C845	1-161-379-00	CERAMIC	0.01MF 30% 16V				
C846	1-124-589-11	ELECT	47MF 20% 16V				
C847	1-136-165-00	MYLAR	0.1MF 10% 50V				
C848	1-161-379-00	CERAMIC	0.01MF 30% 16V				
C849	1-136-169-00	MYLAR	0.22MF 10% 50V				
C850	1-124-589-11	ELECT	47MF 20% 16V				
C851	1-136-287-11	FILM	0.0047MF 10% 50V				
C852	1-130-475-00	MYLAR	0.0022MF 10% 50V				
C853	1-124-589-11	ELECT	47MF 20% 16V				
C854	1-124-589-11	ELECT	47MF 20% 16V				
C855	1-130-475-00	MYLAR	0.0022MF 10% 50V				
C856	1-124-261-00	ELECT	10MF 20% 50V				

CONNECTOR

CN102	1-506-469-11	PIN, CONNECTOR 4P
CN110	*1-560-892-00	PIN, CONNECTOR 4P
CN114	*1-506-474-11	PIN, CONNECTOR 9P
CN120	1-506-469-11	PIN, CONNECTOR 4P
CN121	1-506-471-11	PIN, CONNECTOR 6P
CN122	1-506-469-11	PIN, CONNECTOR 4P
CN130	1-506-473-11	PIN, CONNECTOR 8P
CN133	*1-506-467-11	PIN, CONNECTOR 2P
CN301	1-506-473-11	PIN, CONNECTOR 8P
CN302	*1-506-467-11	PIN, CONNECTOR 2P
CN303	1-506-470-11	PIN, CONNECTOR 5P
CN309	1-506-468-11	PIN, CONNECTOR 3P
CN310	*1-560-893-00	PIN, CONNECTOR 5P
CN312	1-506-472-11	PIN, CONNECTOR 7P
CN313	1-506-469-11	PIN, CONNECTOR 4P
CN315	1-506-467-11	PIN, CONNECTOR 2P

TRIMMER

CV701	1-141-245-00	TRIMMER, CERAMIC
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When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description
<u>DIODE</u>		
D103	8-719-911-19	DIODE 1SS119
D104	8-719-911-19	DIODE 1SS119
D107	8-719-911-19	DIODE 1SS119
D108	8-719-911-19	DIODE 1SS119
D110	8-719-911-19	DIODE 1SS119
D111	8-719-911-19	DIODE 1SS119
D112	8-719-911-19	DIODE 1SS119
D601	8-719-911-19	DIODE 1SS119
D603	8-719-911-19	DIODE 1SS119
D604	8-719-110-31	DIODE RD12E-B
D605	8-719-911-19	DIODE 1SS119
D606	8-719-911-19	DIODE 1SS119
D607	8-719-911-19	DIODE 1SS119
D701	8-719-911-19	DIODE 1SS119
D801	8-719-911-19	DIODE 1SS119
D802	8-719-911-19	DIODE 1SS119
D803	8-719-911-19	DIODE 1SS119
D804	8-719-911-19	DIODE 1SS119
D805	8-719-911-19	DIODE 1SS119
D806	8-719-911-19	DIODE 1SS119
<u>DELAY LINE</u>		
FL701	1-415-361-11	DELAY LINE
<u>IC</u>		
IC101	8-759-103-19	IC UPC319C
IC102	8-759-103-19	IC UPC319C
IC103	8-759-902-21	IC SN74LS22 1N
IC104	8-759-314-41	IC HA11441
IC105	8-759-901-23	IC SN74LS123N
IC106	8-759-618-48	IC M51848L
IC107	8-759-240-40	IC TC4040BP
IC108	8-759-202-16	IC TC74HC11P
IC109	8-759-202-14	IC TC74HC08P
IC110	8-759-202-11	IC TC74HC00P
IC111	8-759-902-21	IC SN74LS22 1N
IC112	8-759-618-48	IC M51848L
IC601	8-759-981-57	IC RC2043DD
IC602	8-759-605-46	IC M51131L
IC603	8-759-140-53	IC UPD4053BC
IC604	8-759-981-57	IC RC2043DD
IC605	8-759-605-46	IC M51131L
IC606	8-759-981-57	IC RC2043DD
IC608	8-759-605-46	IC M51131L
IC609	8-759-605-46	IC M51131L
IC701	8-759-202-12	IC TC74HC02P
IC702	8-759-203-05	IC TC74HC193P
IC703	8-759-603-53	IC M51271SP
IC704	8-759-007-40	IC TL082CP
IC705	8-752-030-77	IC V7040
IC706	8-759-602-06	IC M5109P

Remark	Ref.No	Part No.	Description	Remark
	IC801	8-759-102-37	IC UPD4052BC	
	IC802	8-759-102-37	IC UPD4052BC	
	IC803	8-759-140-66	IC UPD4066BC	
	IC804	8-759-203-83	IC TC74HC4538P	
	IC805	8-759-203-83	IC TC74HC4538P	
	IC806	8-759-140-53	IC UPD4053BC	
	IC807	8-759-745-61	IC NJM4560D-D	
	IC808	8-759-745-61	IC NJM4560D-D	
	IC809	8-759-103-19	IC UPC319C	
	IC810	8-759-103-19	IC UPC319C	
	IC811	8-759-202-18	IC TC74HC20P	
	IC812	8-759-140-66	IC UPD4066BC	
	IC813	8-759-140-53	IC UPD4053BC	
	IC814	8-759-001-42	IC MC74HC174N	
	<u>COIL</u>			
	L101	1-408-413-00	INDUCTOR 22UH	
	L102	1-410-482-31	INDUCTOR 100UH	
	L201	1-408-413-00	INDUCTOR 22UH	
	L702	1-408-419-00	INDUCTOR 68UH	
	L704	1-410-473-11	INDUCTOR 18UH	
	L705	1-408-420-00	INDUCTOR 82UH	
	L706	1-410-473-11	INDUCTOR 18UH	
	L707	1-408-420-00	INDUCTOR 82UH	
	<u>TRANSISTOR</u>			
	Q101	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q102	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q103	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q104	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q105	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q106	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q107	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q108	8-729-173-38	TRANSISTOR 2SA733-K	
	Q109	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q110	8-729-173-38	TRANSISTOR 2SA733-K	
	Q111	8-729-173-38	TRANSISTOR 2SA733-K	
	Q112	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q113	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q114	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q115	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q116	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q117	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q119	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q120	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q121	8-729-900-80	TRANSISTOR DTC114ES	
	Q122	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q123	8-729-900-80	TRANSISTOR DTC114ES	
	Q124	8-729-900-80	TRANSISTOR DTC114ES	
	Q125	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q126	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q127	8-729-119-78	TRANSISTOR 2SC2785-HFE	
	Q128	8-729-119-78	TRANSISTOR 2SC2785-HFE	

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
Q129	8-729-900-61	TRANSISTOR DTA114ES		Q826	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q130	8-729-119-78	TRANSISTOR 2SC2785-HFE		Q827	8-729-173-38	TRANSISTOR 2SA733-K	
Q601	8-729-119-78	TRANSISTOR 2SC2785-HFE		Q828	8-729-173-38	TRANSISTOR 2SA733-K	
Q602	8-729-173-38	TRANSISTOR 2SA733-K		Q829	8-729-900-80	TRANSISTOR DTC114ES	
Q603	8-729-173-38	TRANSISTOR 2SA733-K		Q840	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q604	8-729-173-38	TRANSISTOR 2SA733-K		Q841	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q605	8-729-119-78	TRANSISTOR 2SC2785-HFE		Q842	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q606	8-729-105-72	TRANSISTOR 2SK523-L1		Q843	8-729-173-38	TRANSISTOR 2SA733-K	
Q607	8-729-105-72	TRANSISTOR 2SK523-L1		Q844	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q701	8-729-119-78	TRANSISTOR 2SC2785-HFE		Q845	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q702	8-729-119-78	TRANSISTOR 2SC2785-HFE		Q846	8-729-173-38	TRANSISTOR 2SA733-K	
Q703	8-729-119-78	TRANSISTOR 2SC2785-HFE		Q847	8-729-900-80	TRANSISTOR DTC114ES	
Q704	8-729-173-38	TRANSISTOR 2SA733-K		Q848	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q705	8-729-119-78	TRANSISTOR 2SA733-K		Q849	8-729-119-78	TRANSISTOR 2SC2785-HFE	
Q706	8-729-173-38	TRANSISTOR 2SA733-K		<u>RESISTOR</u>			
Q707	8-729-119-78	TRANSISTOR 2SC2785-HFE		R100	1-249-428-11	CARBON 8.2K 5%	1/4W
Q708	8-729-173-38	TRANSISTOR 2SA733-K		R101	1-249-409-11	CARBON 220 5%	1/4W
Q709	8-729-119-78	TRANSISTOR 2SC2785-HFE		R102	1-249-421-11	CARBON 2.2K 5%	1/4W
Q710	8-729-119-78	TRANSISTOR 2SC2785-HFE		R103	1-249-416-11	CARBON 820 5%	1/4W
Q711	8-729-119-78	TRANSISTOR 2SC2785-HFE		R104	1-249-417-11	CARBON 1K 5%	1/4W
Q712	8-729-900-80	TRANSISTOR DTC114ES		R105	1-249-417-11	CARBON 1K 5%	1/4W
Q713	8-729-119-78	TRANSISTOR 2SC2785-HFE		R106	1-249-417-11	CARBON 1K 5%	1/4W
Q714	8-729-119-78	TRANSISTOR 2SC2785-HFE		R107	1-247-903-00	CARBON 1M 5%	1/4W
Q715	8-729-173-38	TRANSISTOR 2SA733-K		R108	1-249-417-11	CARBON 1K 5%	1/4W
Q716	8-729-119-78	TRANSISTOR 2SC2785-HFE		R109	1-249-421-11	CARBON 2.2K 5%	1/4W
Q718	8-729-900-80	TRANSISTOR DTC114ES		R110	1-249-417-11	CARBON 1K 5%	1/4W
Q719	8-729-119-78	TRANSISTOR 2SC2785-HFE		R111	1-249-428-11	CARBON 8.2K 5%	1/4W
Q720	8-729-119-78	TRANSISTOR 2SC2785-HFE		R112	1-249-428-11	CARBON 8.2K 5%	1/4W
Q801	8-729-119-78	TRANSISTOR 2SC2785-HFE		R113	1-247-903-00	CARBON 1M 5%	1/4W
Q802	8-729-173-38	TRANSISTOR 2SA733-K		R114	1-249-421-11	CARBON 2.2K 5%	1/4W
Q803	8-729-173-38	TRANSISTOR 2SA733-K		R115	1-249-423-11	CARBON 3.3K 5%	1/4W
Q804	8-729-119-78	TRANSISTOR 2SC2785-HFE		R116	1-249-402-11	CARBON 56 5%	1/4W
Q805	8-729-173-38	TRANSISTOR 2SA733-K		R117	1-249-419-11	CARBON 1.5K 5%	1/4W
Q806	8-729-173-38	TRANSISTOR 2SA733-K		R118	1-249-422-11	CARBON 2.7K 5%	1/4W
Q807	8-729-900-80	TRANSISTOR DTC114ES		R119	1-249-424-11	CARBON 3.9K 5%	1/4W
Q808	8-729-119-78	TRANSISTOR 2SC2785-HFE		R120	1-249-429-11	CARBON 10K 5%	1/4W
Q809	8-729-173-38	TRANSISTOR 2SA733-K		R121	1-249-409-11	CARBON 220 5%	1/4W
Q810	8-729-173-38	TRANSISTOR 2SA733-K		R122	1-249-429-11	CARBON 10K 5%	1/4W
Q811	8-729-900-80	TRANSISTOR DTC114ES		R123	1-249-421-11	CARBON 2.2K 5%	1/4W
Q812	8-729-119-78	TRANSISTOR 2SC2785-HFE		R124	1-249-409-11	CARBON 220 5%	1/4W
Q813	8-729-119-78	TRANSISTOR 2SC2785-HFE		R125	1-247-887-00	CARBON 220K 5%	1/4W
Q814	8-729-119-78	TRANSISTOR 2SC2785-HFE		R126	1-249-421-11	CARBON 2.2K 5%	1/4W
Q815	8-729-173-38	TRANSISTOR 2SA733-K		R127	1-249-427-11	CARBON 6.8K 5%	1/4W
Q816	8-729-119-78	TRANSISTOR 2SC2785-HFE		R128	1-249-421-11	CARBON 2.2K 5%	1/4W
Q817	8-729-119-78	TRANSISTOR 2SC2785-HFE		R129	1-249-427-11	CARBON 6.8K 5%	1/4W
Q818	8-729-173-38	TRANSISTOR 2SA733-K		R130	1-249-421-11	CARBON 2.2K 5%	1/4W
Q819	8-729-900-80	TRANSISTOR DTC114ES		R131	1-249-421-11	CARBON 2.2K 5%	1/4W
Q820	8-729-119-78	TRANSISTOR 2SC2785-HFE		R132	1-249-423-11	CARBON 3.3K 5%	1/4W
Q821	8-729-173-38	TRANSISTOR 2SA733-K		R133	1-249-421-11	CARBON 2.2K 5%	1/4W
Q822	8-729-119-78	TRANSISTOR 2SC2785-HFE		R134	1-249-421-11	CARBON 2.2K 5%	1/4W
Q823	8-729-173-38	TRANSISTOR 2SA733-K		R135	1-249-434-11	CARBON 27K 5%	1/4W
Q824	8-729-173-38	TRANSISTOR 2SA733-K		R136	1-249-429-11	CARBON 10K 5%	1/4W
Q825	8-729-900-80	TRANSISTOR DTC114ES					

When indicating parts by reference number, please include the board name.

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Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
R137	1-249-419-11	CARBON	1.5K 5% 1/4W	R203	1-249-421-11	CARBON	2.2K 5% 1/4W
R138	1-249-424-11	CARBON	3.9K 5% 1/4W	R205	1-249-421-11	CARBON	2.2K 5% 1/4W
R139	1-249-423-11	CARBON	3.3K 5% 1/4W	R206	1-249-429-11	CARBON	10K 5% 1/4W
R140	1-249-419-11	CARBON	1.5K 5% 1/4W	R207	1-249-417-11	CARBON	1K 5% 1/4W
R141	1-249-433-11	CARBON	22K 5% 1/4W	R601	1-249-427-11	CARBON	6.8K 5% 1/4W
R142	1-249-428-11	CARBON	8.2K 5% 1/4W	R602	1-249-431-11	CARBON	15K 5% 1/4W
R144	1-249-431-11	CARBON	15K 5% 1/4W	R605	1-249-431-11	CARBON	15K 5% 1/4W
R145	1-249-397-11	CARBON	22 5% 1/4W	R606	1-249-409-11	CARBON	220 5% 1/4W
R146	1-249-425-11	CARBON	4.7K 5% 1/4W	R608	1-249-422-11	CARBON	2.7K 5% 1/4W
R147	1-249-434-11	CARBON	27K 5% 1/4W	R612	1-249-440-11	CARBON	82K 5% 1/4W
R148	1-249-431-11	CARBON	15K 5% 1/4W	R613	1-249-402-11	CARBON	56 5% 1/4W
R149	1-249-429-11	CARBON	10K 5% 1/4W	R614	1-249-423-11	CARBON	3.3K 5% 1/4W
R150	1-249-429-11	CARBON	10K 5% 1/4W	R615	1-247-881-00	CARBON	120K 5% 1/4W
R151	1-249-419-11	CARBON	1.5K 5% 1/4W	R617	1-249-402-11	CARBON	56 5% 1/4W
R153	1-249-419-11	CARBON	1.5K 5% 1/4W	R618	1-249-429-11	CARBON	10K 5% 1/4W
R155	1-249-418-11	CARBON	1.2K 5% 1/4W	R619	1-249-439-11	CARBON	68K 5% 1/4W
R156	1-249-427-11	CARBON	6.8K 5% 1/4W	R620	1-249-441-11	CARBON	100K 5% 1/4W
R157	1-249-427-11	CARBON	6.8K 5% 1/4W	R621	1-249-441-11	CARBON	100K 5% 1/4W
R158	1-249-429-11	CARBON	10K 5% 1/4W	R622	1-249-417-11	CARBON	1K 5% 1/4W
R159	1-249-425-11	CARBON	4.7K 5% 1/4W	R623	1-249-417-11	CARBON	1K 5% 1/4W
R162	1-249-438-11	CARBON	56K 5% 1/4W	R624	1-249-417-11	CARBON	1K 5% 1/4W
R163	1-249-421-11	CARBON	2.2K 5% 1/4W	R625	1-249-417-11	CARBON	1K 5% 1/4W
R165	1-249-413-11	CARBON	470 5% 1/4W	R626	1-249-417-11	CARBON	1K 5% 1/4W
R166	1-249-417-11	CARBON	1K 5% 1/4W	R627	1-249-417-11	CARBON	1K 5% 1/4W
R167	1-249-413-11	CARBON	470 5% 1/4W	R628	1-249-441-11	CARBON	100K 5% 1/4W
R168	1-249-417-11	CARBON	1K 5% 1/4W	R629	1-249-441-11	CARBON	100K 5% 1/4W
R169	1-249-413-11	CARBON	470 5% 1/4W	R630	1-249-441-11	CARBON	100K 5% 1/4W
R170	1-249-417-11	CARBON	1K 5% 1/4W	R631	1-249-441-11	CARBON	100K 5% 1/4W
R171	1-249-413-11	CARBON	470 5% 1/4W	R634	1-249-426-11	CARBON	5.6K 5% 1/4W
R172	1-249-417-11	CARBON	1K 5% 1/4W	R635	1-249-429-11	CARBON	10K 5% 1/4W
R173	1-249-413-11	CARBON	470 5% 1/4W	R636	1-249-429-11	CARBON	10K 5% 1/4W
R174	1-249-417-11	CARBON	1K 5% 1/4W	R637	1-249-402-11	CARBON	56 5% 1/4W
R175	1-249-421-11	CARBON	2.2K 5% 1/4W	R638	1-249-402-11	CARBON	56 5% 1/4W
R176	1-249-417-11	CARBON	1K 5% 1/4W	R639	1-249-426-11	CARBON	5.6K 5% 1/4W
R177	1-249-426-11	CARBON	5.6K 5% 1/4W	R640	1-249-429-11	CARBON	10K 5% 1/4W
R178	1-249-429-11	CARBON	10K 5% 1/4W	R641	1-249-429-11	CARBON	10K 5% 1/4W
R179	1-249-439-11	CARBON	68K 5% 1/4W	R642	1-249-429-11	CARBON	10K 5% 1/4W
R180	1-249-413-11	CARBON	470 5% 1/4W	R643	1-249-429-11	CARBON	10K 5% 1/4W
R181	1-249-409-11	CARBON	220 5% 1/4W	R644	1-249-433-11	CARBON	22K 5% 1/4W
R186	1-249-413-11	CARBON	470 5% 1/4W	R645	1-249-429-11	CARBON	10K 5% 1/4W
R187	1-249-421-11	CARBON	2.2K 5% 1/4W	R651	1-249-429-11	CARBON	10K 5% 1/4W
R188	1-249-429-11	CARBON	10K 5% 1/4W	R652	1-249-429-11	CARBON	10K 5% 1/4W
R189	1-249-418-11	CARBON	1.2K 5% 1/4W	R655	1-249-429-11	CARBON	10K 5% 1/4W
R191	1-249-418-11	CARBON	1.2K 5% 1/4W	R660	1-249-427-11	CARBON	6.8K 5% 1/4W
R193	1-249-413-11	CARBON	470 5% 1/4W	R661	1-249-429-11	CARBON	10K 5% 1/4W
R194	1-249-417-11	CARBON	1K 5% 1/4W	R662	1-249-425-11	CARBON	4.7K 5% 1/4W
R195	1-249-421-11	CARBON	2.2K 5% 1/4W	R663	1-247-903-00	CARBON	1M 5% 1/4W
R196	1-249-417-11	CARBON	1K 5% 1/4W	R664	1-247-903-00	CARBON	1M 5% 1/4W
R197	1-249-429-11	CARBON	10K 5% 1/4W	R665	1-249-429-11	CARBON	10K 5% 1/4W
R198	1-249-425-11	CARBON	4.7K 5% 1/4W	R701	1-249-427-11	CARBON	6.8K 5% 1/4W
R200	1-249-417-11	CARBON	1K 5% 1/4W	R703	1-249-421-11	CARBON	2.2K 5% 1/4W
R201	1-249-413-11	CARBON	470 5% 1/4W	R704	1-249-431-11	CARBON	15K 5% 1/4W
R202	1-249-437-11	CARBON	47K 5% 1/4W	R705	1-249-435-11	CARBON	33K 5% 1/4W

When indicating parts by reference number, please include the board name.

Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
R706	1-249-431-11	CARBON	15K 5% 1/4W	R760	1-249-425-11	CARBON	4.7K 5% 1/4W
R707	1-249-431-11	CARBON	15K 5% 1/4W	R761	1-249-429-11	CARBON	10K 5% 1/4W
R708	1-247-895-00	CARBON	470K 5% 1/4W	R762	1-249-413-11	CARBON	470 5% 1/4W
R709	1-249-436-11	CARBON	39K 5% 1/4W	R763	1-249-417-11	CARBON	1K 5% 1/4W
R710	1-249-421-11	CARBON	2.2K 5% 1/4W	R764	1-249-417-11	CARBON	1K 5% 1/4W
R711	1-249-413-11	CARBON	470 5% 1/4W	R765	1-249-413-11	CARBON	470 5% 1/4W
R712	1-249-435-11	CARBON	33K 5% 1/4W	R766	1-249-416-11	CARBON	820 5% 1/4W
R713	1-249-433-11	CARBON	22K 5% 1/4W	R767	1-249-421-11	CARBON	2.2K 5% 1/4W
R714	1-249-417-11	CARBON	1K 5% 1/4W	R769	1-249-409-11	CARBON	220 5% 1/4W
R715	1-249-440-11	CARBON	82K 5% 1/4W	R770	1-249-417-11	CARBON	1K 5% 1/4W
R716	1-249-417-11	CARBON	1K 5% 1/4W	R771	1-249-417-11	CARBON	1K 5% 1/4W
R717	1-247-866-11	CARBON	30K 5% 1/4W	R772	1-249-417-11	CARBON	1K 5% 1/4W
R718	1-249-425-11	CARBON	4.7K 5% 1/4W	R773	1-249-411-11	CARBON	330 5% 1/4W
R719	1-249-409-11	CARBON	220 5% 1/4W	R774	1-249-417-11	CARBON	1K 5% 1/4W
R720	1-249-403-11	CARBON	68 5% 1/4W	R775	1-249-416-11	CARBON	820 5% 1/4W
R721	1-249-405-11	CARBON	100 5% 1/4W	R776	1-249-429-11	CARBON	10K 5% 1/4W
R722	1-249-425-11	CARBON	4.7K 5% 1/4W	R777	1-249-409-11	CARBON	220 5% 1/4W
R723	1-249-419-11	CARBON	1.5K 5% 1/4W	R778	1-249-430-11	CARBON	12K 5% 1/4W
R724	1-249-413-11	CARBON	470 5% 1/4W	R779	1-249-417-11	CARBON	1K 5% 1/4W
R725	1-249-435-11	CARBON	33K 5% 1/4W	R780	1-249-413-11	CARBON	470 5% 1/4W
R727	1-249-413-11	CARBON	470 5% 1/4W	R781	1-249-417-11	CARBON	1K 5% 1/4W
R728	1-249-413-11	CARBON	470 5% 1/4W	R782	1-249-425-11	CARBON	4.7K 5% 1/4W
R729	1-249-413-11	CARBON	470 5% 1/4W	R783	1-249-409-11	CARBON	220 5% 1/4W
R730	1-249-417-11	CARBON	1K 5% 1/4W	R785	1-249-417-11	CARBON	1K 5% 1/4W
R731	1-249-413-11	CARBON	470 5% 1/4W	R787	1-249-429-11	CARBON	10K 5% 1/4W
R732	1-249-417-11	CARBON	1K 5% 1/4W	R789	1-249-419-11	CARBON	1.5K 5% 1/4W
R733	1-249-411-11	CARBON	330 5% 1/4W	R790	1-249-429-11	CARBON	10K 5% 1/4W
R734	1-249-419-11	CARBON	1.5K 5% 1/4W	R792	1-249-413-11	CARBON	470 5% 1/4W
R735	1-249-421-11	CARBON	2.2K 5% 1/4W	R794	1-249-429-11	CARBON	10K 5% 1/4W
R736	1-249-413-11	CARBON	470 5% 1/4W	R801	1-249-409-11	CARBON	220 5% 1/4W
R737	1-249-417-11	CARBON	1K 5% 1/4W	R802	1-249-433-11	CARBON	22K 5% 1/4W
R738	1-247-903-00	CARBON	1M 5% 1/4W	R803	1-249-409-11	CARBON	220 5% 1/4W
R739	1-249-429-11	CARBON	10K 5% 1/4W	R804	1-249-433-11	CARBON	22K 5% 1/4W
R740	1-249-421-11	CARBON	2.2K 5% 1/4W	R805	1-249-422-11	CARBON	2.7K 5% 1/4W
R741	1-249-430-11	CARBON	12K 5% 1/4W	R806	1-249-429-11	CARBON	10K 5% 1/4W
R742	1-249-427-11	CARBON	6.8K 5% 1/4W	R807	1-249-437-11	CARBON	47K 5% 1/4W
R743	1-249-413-11	CARBON	470 5% 1/4W	R808	1-249-413-11	CARBON	470 5% 1/4W
R744	1-249-429-11	CARBON	10K 5% 1/4W	R809	1-249-431-11	CARBON	15K 5% 1/4W
R745	1-249-430-11	CARBON	12K 5% 1/4W	R810	1-249-413-11	CARBON	470 5% 1/4W
R746	1-249-409-11	CARBON	220 5% 1/4W	R811	1-249-413-11	CARBON	470 5% 1/4W
R747	1-249-411-11	CARBON	330 5% 1/4W	R812	1-249-417-11	CARBON	1K 5% 1/4W
R748	1-249-420-11	CARBON	1.8K 5% 1/4W	R813	1-249-413-11	CARBON	470 5% 1/4W
R749	1-249-411-11	CARBON	330 5% 1/4W	R815	1-249-425-11	CARBON	4.7K 5% 1/4W
R750	1-249-420-11	CARBON	1.8K 5% 1/4W	R816	1-215-437-00	METAL	4.7K 1% 1/6W
R751	1-249-411-11	CARBON	330 5% 1/4W	R817	1-215-469-00	METAL	100K 1% 1/6W
R752	1-249-420-11	CARBON	1.8K 5% 1/4W	R818	1-215-437-00	METAL	4.7K 1% 1/6W
R753	1-249-421-11	CARBON	2.2K 5% 1/4W	R819	1-249-421-11	CARBON	2.2K 5% 1/4W
R754	1-249-413-11	CARBON	470 5% 1/4W	R820	1-249-425-11	CARBON	4.7K 5% 1/4W
R755	1-249-413-11	CARBON	470 5% 1/4W	R821	1-249-413-11	CARBON	470 5% 1/4W
R756	1-249-413-11	CARBON	470 5% 1/4W	R823	1-249-413-11	CARBON	470 5% 1/4W
R757	1-249-429-11	CARBON	10K 5% 1/4W	R824	1-249-425-11	CARBON	4.7K 5% 1/4W
R758	1-249-429-11	CARBON	10K 5% 1/4W	R825	1-249-425-11	CARBON	4.7K 5% 1/4W
R759	1-249-417-11	CARBON	1K 5% 1/4W	R826	1-215-445-00	METAL	10K 1% 1/6W

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Ref.No	Part No.	Description
RV704	1-228-991-00	RES, ADJ, CARBON 2.2K
RV705	1-228-991-00	RES, ADJ, CARBON 2.2K
RV706	1-228-991-00	RES, ADJ, CARBON 2.2K
RV707	1-228-990-00	RES, ADJ, CARBON 1K
RV801	1-228-990-00	RES, ADJ, CARBON 1K
RV802	1-228-989-00	RES, ADJ, CARBON 470
RV803	1-228-989-00	RES, ADJ, CARBON 470
RV804	1-228-990-00	RES, ADJ, CARBON 1K
RV805	1-228-989-00	RES, ADJ, CARBON 470
RV806	1-228-990-00	RES, ADJ, CARBON 1K
RV807	1-228-995-00	RES, ADJ, CARBON 22K
RV808	1-228-991-00	RES, ADJ, CARBON 2.2K
RV809	1-228-989-00	RES, ADJ, CARBON 470
RV810	1-228-990-00	RES, ADJ, CARBON 1K

CRYSTAL

X701 1-567-733-11 VIBRATOR, CRYSTAL

*A-7061-751-A PW-61 BOARD, COMPLETE (UK/AUS MODEL)

*A-7061-835-A PW-61 BOARD, COMPLETE (AEP MODEL)

*1-533-189-11 HOLDER, FUSE

4-870-539-00 PLATE, GROUND

CAPACITOR

C400	1-126-176-11	ELECT	220MF	20%	10V
C401	1-136-472-11	FILM	0.1MF	20%	250V
C402	1-124-636-00	ELECT	3300MF	20%	25V
C404	1-161-051-00	CERAMIC	0.01MF	10%	25V
C405	1-161-051-00	CERAMIC	0.01MF	10%	25V
C406	1-161-051-00	CERAMIC	0.01MF	10%	25V
C407	1-161-051-00	CERAMIC	0.01MF	10%	25V
C408	1-124-898-11	ELECT	4700MF	20%	16V
C409	1-123-875-11	ELECT	10MF	20%	50V
C410	1-124-898-11	ELECT	4700MF	20%	16V
C412	1-124-887-00	ELECT	3300MF	20%	16V
C413	1-124-887-00	ELECT	3300MF	20%	16V
C414	1-123-875-11	ELECT	10MF	20%	50V
C415	1-123-875-11	ELECT	10MF	20%	50V
C416	1-126-176-11	ELECT	220MF	20%	10V
C417	1-161-379-00	CERAMIC	0.01MF	30%	16V
C418	1-126-176-11	ELECT	220MF	20%	10V
C419	1-161-379-00	CERAMIC	0.01MF	30%	16V
C424	1-126-176-11	ELECT	220MF	20%	10V
C426	1-124-120-11	ELECT	220MF	20%	16V
C662	1-123-875-11	ELECT	10MF	20%	50V

CONNECTOR

CN401 *1-564-321-00 PIN, CONNECTOR 2P
 CN402 *1-564-687-11 PIN, CONNECTOR 3P

Ref.No Part No. Description Remark

CN403 *1-560-896-00 PIN, CONNECTOR 8P
 CN404 *1-560-894-00 PIN, CONNECTOR 6P
 CN405 *1-560-891-00 PIN, CONNECTOR 3P

DIODE

D401 1-8-719-200-82 DIODE 11ES2
 D402 1-8-719-200-82 DIODE 11ES2
 D403 1-8-719-500-36 DIODE D2SB20
 D404 1-8-719-510-06 DIODE S1WB60
 D602 8-719-911-19 DIODE 1SS119

FUSE

F401 1-1-532-259-00 FUSE T1.6A 250V

IC

IC401 8-759-982-32 IC RC78M06FA
 IC402 8-759-701-66 IC NJM79M06FA

IC LINK

PS401 1-1-532-637-00 LINK, IC (ICP-N25) 1.0A
 PS402 1-1-532-605-00 LINK, IC (ICP-N10) 0.4A
 PS403 1-1-532-605-00 LINK, IC (ICP-N10) 0.4A
 PS405 1-1-532-844-21 LINK, IC (PRF3150) 3.15A

RESISTOR

R401	1-249-470-11	CARBON	0.47	5%	1/2W	F
R402	1-249-470-11	CARBON	0.47	5%	1/2W	F
R407	1-249-409-11	CARBON	220	5%	1/4W	
R663	1-247-887-00	CARBON	220K	5%	1/4W	

TERMINAL PIN

TP401 1-535-443-00 PIN, TERMINAL (AC CORD)
 TP402 1-535-443-00 PIN, TERMINAL (AC CORD)

*1-630-229-21 FT-38 BOARD

*3-662-262-00 HOLDER (D), LED

DIODE

D103 8-719-940-82 DIODE SLR-34MC3
 D104 8-719-300-71 DIODE SEL2210R (CHROMA NR)
 D118 8-719-300-71 DIODE SEL2210R (VIDEO ART REVERSE)
 D122 8-719-812-32 DIODE TLY123 (REVERSE NEGA/POS1)
 D138 8-719-940-82 DIODE SLR-34MC3 (SPLIT SCREEN)

RESISTOR

R103	1-249-413-11	CARBON	470	5%	1/4W
R104	1-249-421-11	CARBON	2.2K	5%	1/4W
R105	1-249-413-11	CARBON	470	5%	1/4W
R106	1-249-437-11	CARBON	47K	5%	1/4W
R107	1-249-413-11	CARBON	470	5%	1/4W

Note: The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

FT-38**JK-44****MJ-22**

Ref.No	Part No.	Description	Remark	f.No	Part No.	Description	Remark
R113	1-249-413-11	CARBON 470 5% 1/4W		D017	8-719-108-12	DIODE RD9.1EW	
R114	1-249-413-11	CARBON 470 5% 1/4W		D018	8-719-108-12	DIODE RD9.1EW	
R115	1-249-421-11	CARBON 2.2K 5% 1/4W		D019	8-719-108-12	DIODE RD9.1EW	
R122	1-249-437-11	CARBON 47K 5% 1/4W		D020	8-719-108-12	DIODE RD9.1EW	
R123	1-249-413-11	CARBON 470 5% 1/4W		D021	8-719-108-12	DIODE RD9.1EW	
R126	1-249-437-11	CARBON 47K 5% 1/4W		D024	8-719-108-12	DIODE RD9.1EW	
<u>VARIABLE RESISTOR</u>				D025	8-719-108-12	DIODE RD9.1EW	
RV104	1-237-400-11	RES, VAR, CARBON 10K (VIDEO ART)		D026	8-719-108-12	DIODE RD9.1EW	
<u>SWITCH</u>				D027	8-719-108-12	DIODE RD9.1EW	
S102	1-570-797-11	SWITCH, PUSH (1 KEY) (BYPASS)		D801	8-719-108-12	DIODE RD9.1EW	
S103	1-570-797-11	SWITCH, PUSH (1 KEY) (CHROMA NR)		D802	8-719-108-12	DIODE RD9.1EW	
S109	1-570-797-11	SWITCH, PUSH (1 KEY) (VIDEO ART REVERSE)		D803	8-719-108-12	DIODE RD9.1EW	
S113	1-570-797-11	SWITCH, PUSH (1 KEY) (REVERSE NEGA/POSI)		D804	8-719-108-12	DIODE RD9.1EW	
S128	1-570-797-11	SWITCH, PUSH (1 KEY) (SPLIT SCREEN)		<u>TRANSISTOR</u>			
*****				Q001	8-729-119-78	TRANSISTOR 2SC2785-HFE	
*A-7070-842-A JK-44 BOARD, COMPLETE				Q002	8-729-119-78	TRANSISTOR 2SC2785-HFE	
*****				Q003	8-729-119-78	TRANSISTOR 2SC2785-HFE	
*2-128-425-01 BRACKET, S TERMINAL				<u>RESISTOR</u>			
<u>CAPACITOR</u>				R001	1-249-429-11	CARBON 10K 5% 1/4W	
C001	1-123-875-11	ELECT 10MF 20% 50V		R002	1-249-429-11	CARBON 10K 5% 1/4W	
C002	1-123-875-11	ELECT 10MF 20% 50V		R003	1-249-429-11	CARBON 10K 5% 1/4W	
C003	1-123-875-11	ELECT 10MF 20% 50V		R004	1-249-429-11	CARBON 10K 5% 1/4W	
C004	1-123-875-11	ELECT 10MF 20% 50V		R005	1-249-429-11	CARBON 10K 5% 1/4W	
C005	1-123-875-11	ELECT 10MF 20% 50V		R006	1-249-429-11	CARBON 10K 5% 1/4W	
C006	1-123-875-11	ELECT 10MF 20% 50V		R010	1-247-804-11	CARBON 75 5% 1/4W	
C007	1-123-875-11	ELECT 10MF 20% 50V		R011	1-247-804-11	CARBON 75 5% 1/4W	
<u>CONNECTOR</u>				R012	1-247-804-11	CARBON 75 5% 1/4W	
CN051	1-506-481-11	PIN, CONNECTOR 2P		R013	1-247-804-11	CARBON 75 5% 1/4W	
CN052	1-506-487-11	PIN, CONNECTOR 8P		R014	1-247-804-11	CARBON 75 5% 1/4W	
CN053	1-506-482-11	PIN, CONNECTOR 3P		R015	1-247-804-11	CARBON 75 5% 1/4W	
<u>JACK</u>				R016	1-249-441-11	CARBON 100K 5% 1/4W	
CNJ001	1-568-304-11	JACK, PIN 2P (LINE IN)		R017	1-249-441-11	CARBON 100K 5% 1/4W	
CNJ002	1-565-727-31	JACK, PIN 3P (SOURCE IN 1 CH)		R018	1-249-441-11	CARBON 100K 5% 1/4W	
CNJ003	1-565-727-31	JACK, PIN 3P (SOURCE IN 2 CH)		R019	1-249-441-11	CARBON 100K 5% 1/4W	
CNJ004	1-566-728-21	TERMINAL, S (SOURCE IN S VIDEO 1 CH)		R020	1-249-441-11	CARBON 100K 5% 1/4W	
CNJ005	1-566-728-21	TERMINAL, S (SOURCE IN S VIDEO 2 CH)		R021	1-249-441-11	CARBON 100K 5% 1/4W	
CNJ006	1-565-727-31	JACK, PIN 3P (OUTPUT 1 CH)		R022	1-247-804-11	CARBON 75 5% 1/4W	
CNJ007	1-565-727-31	JACK, PIN 3P (OUTPUT 2 CH)		R023	1-247-804-11	CARBON 75 5% 1/4W	
CNJ008	1-566-728-21	TERMINAL, S (OUTPUT S VIDEO 1 CH)		<u>RELAY</u>			
CNJ009	1-566-728-21	TERMINAL, S (OUTPUT S VIDEO 2 CH)		RY001	1-515-529-11	RELAY	
<u>DIODE</u>				RY002	1-515-529-11	RELAY	
D001	8-719-911-19	DIODE 1SS119		RY003	1-515-529-11	RELAY	
D002	8-719-911-19	DIODE 1SS119		*****			
D003	8-719-911-19	DIODE 1SS119		*1-630-220-12 MJ-22 BOARD			
D016	8-719-108-12	DIODE RD9.1EW		*****			
				<u>DIODE</u>			
				D131	8-719-108-12	DIODE RD9.1EW	

When indicating parts by reference number, please include the board name.

MJ-22

PT-68

AM-13

AC-44

Ref.No	Part No.	Description	Remark	Ref.No	Part No.	Description	Remark
		<u>JACK</u>				<u>MISCELLANEOUS</u> *****	
J101	1-507-834-31	JACK (MIC)				△.1-534-817-31 CORD, POWER (AEP MODEL)	
*****						△.1-551-732-11 CORD, POWER (AUS MODEL)	
	*1-630-222-12	PT-68 BOARD				△.1-551-884-32 CORD, POWER (UK MODEL)	
		*****		PT401	△.1-449-826-11	BUSHING (2104), CORD TRANSFORMER, POWER	
		<u>CAPACITOR</u>		*****			
C403	1-123-875-11	ELECT	10MF 20% 50V			<u>ACCESSORIES AND PACKING MATERIALS</u> *****	
C420	1-124-477-11	ELECT	47MF 20% 25V				
C421	1-161-379-00	CERAMIC	0.01MF 30% 16V			<u>Part No.</u>	<u>Description</u>
C427	1-124-477-11	ELECT	47MF 20% 16V				<u>Remark</u>
		<u>IC</u>				*2-128-443-01	CUSHION (UPPER)
IC403	8-759-701-59	IC NJM78M09FA				*2-128-444-01	CUSHION (LOWER)
IC404	8-759-914-44	IC TL431CLPB				*2-182-811-01	INDIVIDUAL CARTON
IC405	8-759-604-29	IC M5F7805				3-786-993-11	MANUAL, INSTRUCTION (ENGLISH/FRENCH/ GERMAN/SPANISH/DUTCH)
		<u>RESISTOR</u>				3-786-993-41	MANUAL, INSTRUCTION (AEP MODEL) (SWEDISH/ITALIAN/PORTUGUESE/ARABIC)
R403	1-249-434-11	CARBON	27K 5% 1/4W			3-786-994-11	REFERENCE, COLOR
R404	1-249-426-11	CARBON	5.6K 5% 1/4W			*****	
		<u>VARIABLE RESISTOR</u>				<u>HARDWARE LIST</u> *****	
RV401	1-228-990-00	RES, ADJ, CARBON 1K				<u>SCREW</u>	
*****						7-682-661-09	SCREW +PSW 4X8
	*1-630-228-21	AM-13 BOARD				7-685-646-79	SCREW +BVTP 3X8 TYPE2 IT-3
		*****				*****	
	2-118-268-01	NUT (M9), HEXAGON					
		<u>VARIABLE RESISTOR</u>					
RV101	1-238-519-21	RES, VAR, CARBON 1K/1K (PHASE CORRECT)					
RV102	1-237-425-11	RES, VAR, CARBON 10K/10K (GAMMA)					
RV103	1-237-399-11	RES, VAR, CARBON 1K (COLOR)					
RV108	1-237-425-21	RES, VAR, CARBON 10K/10K (AUDIO MIX)					
RV113	1-237-400-11	RES, VAR, CARBON 10K (MIC LEVEL)					

	*1-630-227-21	AC-44 BOARD					

		<u>SWITCH</u>					
S401	△.1-553-318-13	SWITCH, PUSH (AC POWER) (1 KEY) (POWER)					

Note: The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

When indicating parts by reference number, please include the board name.

SECTION 7 ELECTRICAL ADJUSTMENT

During the adjustment, see the parts location diagram relevant to the adjustment on Page 130.

This section discusses the matters and instructions required for all the adjustments of the electric circuits of this equipment.

[Instruments Used]

- 1) Monitor TV
- 2) Oscilloscope (mono-or dual trace), bandwidth of 15 MHz or more, with delay mode
- 3) Frequency counter (6 digits or more)
- 4) PAL pattern generator
- 5) Digital voltmeter
- 6) Audio level meter
- 7) Vectorscope
- 8) Audio generator
- 9) Audio attenuator

[Preparation]

Perform adjustment under the following conditions unless otherwise specified.

- INPUT SELECT switch 1CH VIDEO
- BYPASS switch OFF
- SPLIT SCREEN switch OFF
- VIDEO ART REVERSE switch OFF
- VIDEO ART knob MAX (fully clockwise)
- CHROMA NR switch OFF
- REVERSE (NEGA/POSI) switch OFF
- GAMMA knob Center click position
- PHASE CORRECT knob Center click position
- COLOR knob Center click position
- BLACK BALANCE
 - ON/OFF switch OFF
 - WIDE RANGE switch OFF
 - BLACK CLIP switch OFF
 - BLACK CLIP knob MIN (fully counterclockwise)
- WHITE BALANCE
 - ON/OFF switch OFF
 - WIDE RANGE switch OFF
 - WHITE CLIP switch OFF
 - WHITE CLIP knob MIN (fully counterclockwise)
- WIPE PATTERN
 -  switch OFF
 -  switch OFF
 -  switch OFF
 -  switch OFF
 -  switch OFF
 -  switch OFF
- WIPE lever MIN (fully downward)
- FADER COLOR SELECT switch COLOR BAR
- FADER lever MIN (fully downward)
- AUTO SPEED
 - WIPE switch OFF
 - FADER switch OFF
 - SPEED knob FAST (fully clockwise)
 - START switch OFF
- FADER
 - VIDEO switch OFF
 - AUDIO switch OFF
 - WHITE switch OFF
 - BLACK switch OFF
 - BACK COLOR switch ON
- MIC level knob MIN
- AUDIO MIX knob SOURCE

[Connection]

Connect the instruments as shown below.

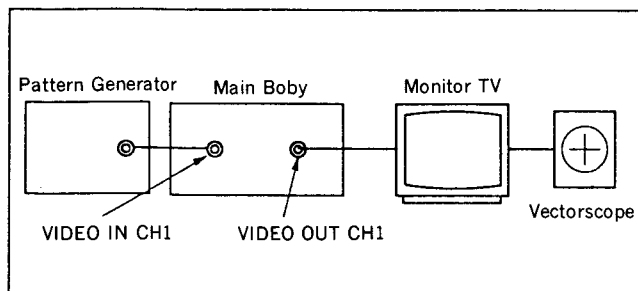


Fig. 7-1.

[Color Bar Signal]

For this adjustment, use a color bar signal obtained from video output of the PAL pattern generator.

Connect the oscilloscope to the JK-44 board CN052 pin ① and check a video input signal for the following:

- (1) The amplitude of a horizontal sync. signal must be $300 \pm 15 \text{ mVp-p}$.
- (2) The amplitude of a video signal must be $700 \pm 20 \text{ mVp-p}$.
- (3) The amplitude of a burst signal must be $300 \pm 15 \text{ mVp-p}$.
- (4) The amplitude of "cyan" or "red" must be $664 \pm 20 \text{ mVp-p}$.

Fig. 7-2. shows the video (color bar) signal used for adjustment.

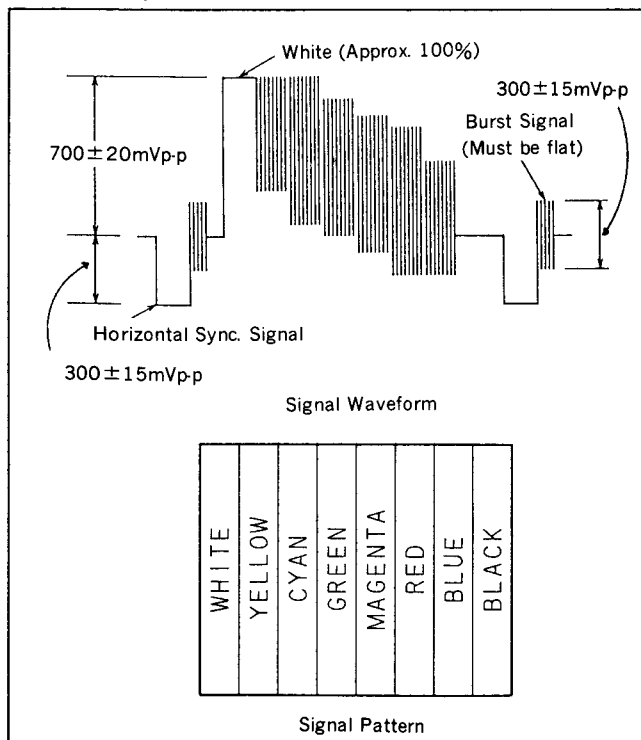


Fig. 7-2 Color Bar Signal of Pattern Generator

[Input/Output Level Impedance]

S-Video input/output

S-VIDEO SOURCE IN (4-pin mini DIN)

S-VIDEO OUTPUT (4-pin mini DIN)

Y-signal : 1 Vp-p , 75 ohms,
unbalanced, sync negative

C-signal : 0.3 Vp-p , 75 ohms,
unbalanced

Video input/output

V SOURCE IN 1 and 2 (phono jacks)

V OUTPUT (phono jacks)

1 Vp-p , 75 ohms, unbalanced, sync
negative

Audio input

R/L SOURCE 1 and 2 (phono jacks)

LINE IN (phono jacks)

Input level : -7.5 dBs ($0 \text{ dBs} =$
 0.775 Vrms)

Input impedance : More than 47
kilohms

MIC (minijack)

Input level : -66 dBs

Input impedance : More than 3
kilohms

Audio output

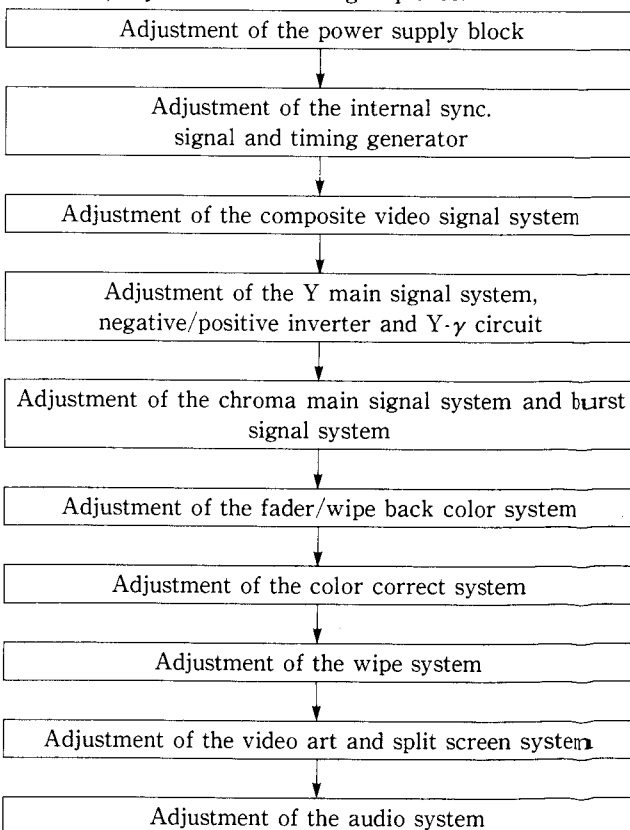
R/L OUTPUT (phono jacks)

Output level : -7.5 dBs at 47 kilohms
load

Output impedance : Less than 10 kilohms

[Adjustment Sequence]

As a rule, adjust in the following sequence.



7-1. ADJUSTMENT OF POWER SUPPLY BLOCK

7-1-1. -5V, +9V Adjustment

Measurement equipment	Digital voltmeter
-5V adjustment	
Measurement point	PW-61 board TP406 (W115 pin ④)
Adjustment element	PT-70 board RV402
Specified value	$-5.00 \pm 0.01 \text{Vdc}$
+9V adjustment	
Measurement point	PW-61 board TP403 (W115 pin ①)
Adjustment element	PT-68 board RV401
Specified value	$+9.00 \pm 0.02 \text{Vdc}$

[Adjustment Method]

- 1) Adjust each supply voltage to the specified value with each adjustment point.

7-1-2. +5V, +6V and -6V Confirmation (PW-61 Board)

Measurement equipment	Digital voltmeter
+5V check	
Measurement point	TP405 (W115 pin ②)
Specified value	$5.0 \pm 0.2 \text{Vdc}$
+6V check	
Measurement point	TP407 (W310 pin ②)
Specified value	$6.0 \pm 0.2 \text{Vdc}$
-6V check	
Measurement point	TP408 (W310 pin ④)
Specified value	$-6.0 \pm 0.2 \text{Vdc}$

[Confirmation]

- 1) Confirm that each supply voltage meets the specified value.

7-2. ADJUSTMENT OF INTERNAL SYNC. SIGNAL AND TIMING GENERATOR

7-2-1. INT SYNC fsc Adjustment (YS-6 Board)

Signal	No signal
Measurement point	A : IC203 pin ⑦ B : Q223 Emitter
Measurement equipment	A : Frequency counter B : Digital voltmeter
Adjustment element	CV205 CV247
Specified value	A : $4433618.75 \pm 30.00 \text{Hz}$ B : $2.0 \pm 0.5 \text{Vdc}$

[Connection]

- 1) Remove the pattern generator.

[Adjustment Method]

- 1) Adjust the voltage of Q223 emitter to $3.5 \pm 0.5 \text{V}$ with CV205.
- 2) Confirm that the frequency of IC203 pin ⑦ is over 4433618Hz.
(In case of over 4433618Hz, move to procedure 5)).
- 3) Adjust the voltage of Q223 emitter to $0.5 \pm 0.5 \text{Vdc}$ with CV247.
- 4) Repeat from 1) to 3).
- 5) Adjust the frequency of IC203 pin ⑦ to $4433618 \pm 20 \text{Hz}$ with CV205.
- 6) Adjust the voltage of Q223 emitter to $2.0 \pm 0.5 \text{Vdc}$ with CV247.
- 7) Repeat 5) and 6).

7-2-2. INT SYNC Burst Level Confirmation (YS-6 Board)

Signal	No signal
Measurement point	Q205 emitter (TP015)
Measurement equipment	Oscilloscope
Specified value	$350 \pm 50 \text{mVp-p}$

[Connection]

- 1) Remove the pattern generator.

[Confirmation]

- 1) Confirm that a burst level is $350 \pm 50 \text{mVp-p}$.

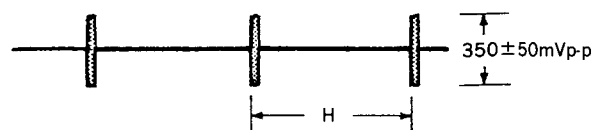


Fig. 7-3.

7-2-3. INT SYNC Level Confirmation (YS-6 Board)

Signal	No signal
Measurement point	Q206 emitter (TP013)
Measurement equipment	Oscilloscope
Specified value	$300 \pm 50 \text{mVp-p}$

[Connection]

- 1) Remove the pattern generator.

[Confirmation]

- 1) Confirm that the INT SYNC level is $300 \pm 50 \text{mVp-p}$.

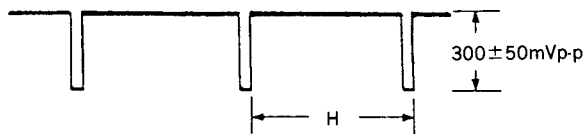


Fig. 7-4.

7-2-4. H AFC Adjustment (CA-16 Board)

Signal	No signal
Measurement point	IC104 pin ⑮
Measurement equipment	Frequency counter
Adjustment element	RV101
Specified value	$15625 \pm 10 \text{Hz}$

[Connection]

- 1) Remove CN133. (Reconnect it after adjustment.)

[Adjustment Method]

- 1) Adjust to $15625 \pm 10 \text{Hz}$ with RV101.

7-2-5. H Front Blanking Adjustment (CA-16 Board)

Signal	Color bar
Measurement point	S VIDEO OUT 1 terminal pin ③ (JK-44 board W123 pin ①)
Measurement equipment	Oscilloscope
Adjustment element	RV103
Specified Value	$1.8 \pm 0.2 \mu\text{sec}$

[Setting of Switches]

- VIDEO FADER switch ON
- WHITE FADER switch ON
- FADER lever MAX (fully upward)

[Adjustment Method]

- 1) Adjust an H front blanking position to $1.8 \pm 0.2 \mu\text{sec}$ with RV103.

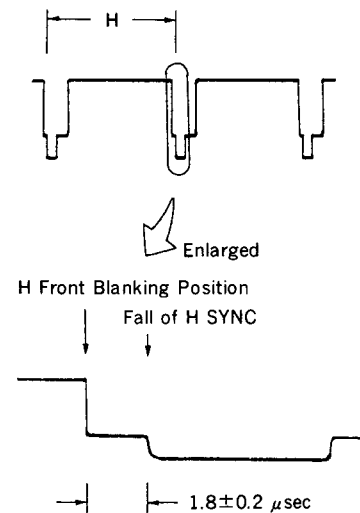


Fig. 7-5.

7-2-6. H Back Blanking Adjustment (CA-16 Board)

Signal	Color bar
Measurement point	S VIDEO OUT 1 terminal pin ③ (JK-44 board W123 pin ①)
Measurement instrument	Oscilloscope
Adjustment element	RV102
Specified value	$5.8 \pm 0.2 \mu\text{sec}$

[Setting of Switches]

- VIDEO FADER switch ON
- WHITE FADER switch ON
- FADER lever MAX (fully upward)

[Adjustment Method]

- 1) Adjust an H back blanking position to $5.8 \pm 0.2 \mu\text{sec}$ with RV102.

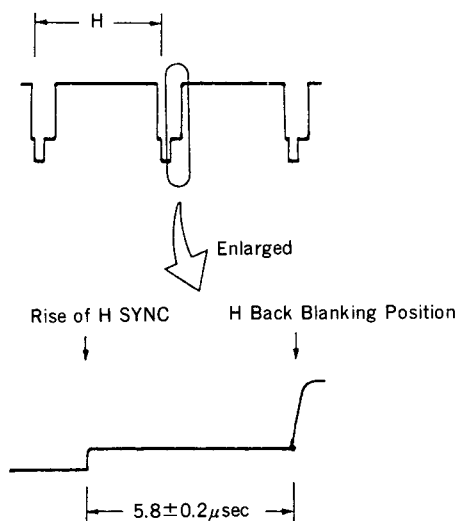


Fig. 7-6.

7-2-7. V Blanking Adjustment (CA-16 Board)

Signal	Color bar
Measurement point	CH1 : IC106 pin ③ CH2 : S VIDEO OUT 1 terminal pin ③ (JK-44 board W123 pin ①)
Measurement equipment	Oscilloscope
Adjustment element	RV104
Specified value	$0 \pm 30 \mu\text{sec}$

[Setting of Switches]

- BYPASS switch ON

[Adjustment Method]

- 1) With RV104, correspond a fall of a V blanking signal (CH1) to a rise of a video portion (CH2).

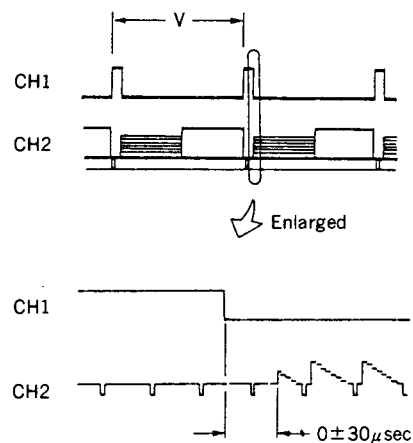


Fig. 7-7.

7-3. ADJUSTMENT OF COMPOSITE VIDEO SIGNAL SYSTEM

7-3-1. Y-SEP Level Adjustment (WF-1 Board)

Signal	Color bar
Measurement point	Q253 emitter (TP017)
Measurement equipment	Oscilloscope
Adjustment element	LV202 (CHROMA) RV204 (Y+SYNC)
Specified value	$0 \pm 40\text{mVp-p}$ (CHROMA) $1.00 \pm 0.05\text{Vp-p}$ (Y+SYNC)

[Adjustment Method]

- 1) Adjust the chroma signal level to min. ($0 \pm 40\text{mVp-p}$) with LV201.
- 2) Adjust the Y signal level to $1.00 \pm 0.05\text{Vp-p}$ with RV204.

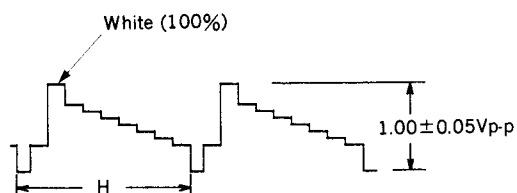


Fig. 7-8.

7-3-2. C-SEP Frequency Characteristic Adjustment (WF-1 Board)

Signal	Color bar
Measurement point	Q254 emitter (TP018)
Measurement instrument	Oscilloscope
Adjustment element	LV203
Specified value	Maximize chroma signal

[Adjustment Method]

- 1) Adjust with LV203 so that chroma signal becomes maximized.

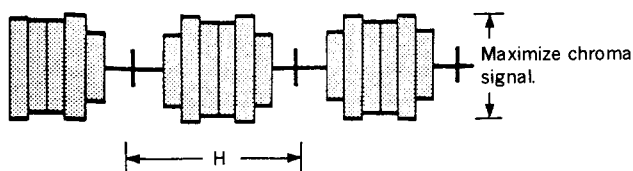


Fig. 7-9.

7-3-3. C-SEP Level Adjustment (WF-1 Board)

Signal	Color bar
Measurement point	Q254 emitter (TP018)
Measurement instrument	Oscilloscope
Adjustment element	RV205
Specified value	$664 \pm 20\text{mVp-p}$

[Adjustment Method]

- 1) Adjust the chroma signal level to $664 \pm 20\text{mVp-p}$.

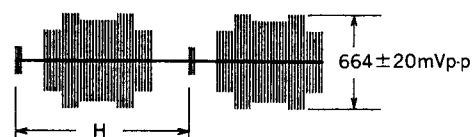


Fig. 7-10.

7-3-4 (1). Y-C SEP Frequency Characteristic Adjustment (WF-1 board) (Using color bar signal)

Signal	Color bar
Measurement point	VIDEO OUT terminal
Measurement instrument	Oscilloscope
Adjustment element	RV203
Specified value	Minimize the spike at border of YELLOW and CYAN.

[Adjustment Method]

- 1) Turn RV203 fully counterclockwise (↺)
- 2) Shorten the spike at border of YELLOW and CYAN by turning RV203 clockwise (↻), and stop it directly before it disappears.

Note : Do not turn RV203 too much, or the angles of CYAN round off.

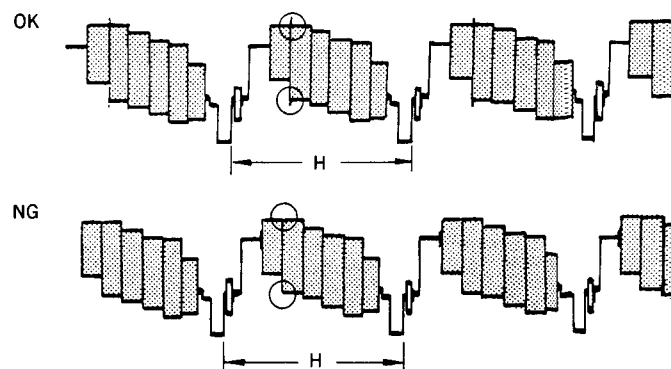


Fig. 7-11 (a).

7-3-4 (2). Y-C SEP Frequency Characteristic Adjustment (WF-1 board) (Using color bar signal)

Signal	Sweep
Measurement point	VIDEO OUT 1 terminal
Measurement instrument	Oscilloscope
Adjustment element	RV203
Specified value	Make flat around 2—6MHz

[Adjustment Method]

- 1) Adjust RV203 so that the waveform of 2—6MHz becomes flat.

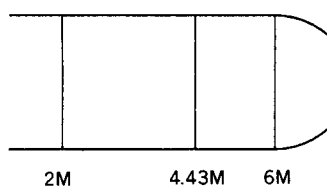


Fig. 7-11 (b).

7-3-5. Composite Y Level and Chroma Level Adjustment (WF-1 Board)

Signal	Color bar
Measurement point	VIDEO OUT 1 terminal
Measurement equipment	Oscilloscope
Adjustment element	RV800 (Y level) RV802 (chroma level)
Specified value	700±30mVp-p (Y level) 664±30mVp-p (chroma level)

- Note :**
- 1) The VIDEO OUT 1 terminal must be terminated at 75Ω.
 - 2) Be sure that the "7-5-2. Chroma Level adjustment" have been already completed.

[Adjustment Method]

- 1) Adjust the Y signal level to 700±30mVp-p with RV800.
- 2) Adjust the chroma signal level to 664±30mVp-p with RV802.

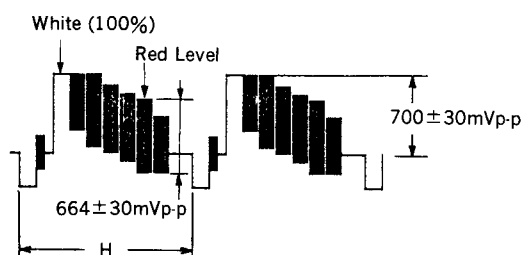


Fig. 7-12.

7-4. ADJUSTMENT OF Y MAIN SIGNAL SYSTEM, NEGATIVE/POSITIVE INVERTER AND Y-γ CIRCUIT.

7-4-1. Pilot Signal Level Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	Q376 emitter
Measurement equipment	Oscilloscope
Adjustment element	RV301
Specified value	0±40mV

[Adjustment Method]

- 1) Adjust the pilot signal level to the white 100% level with RV301. Level difference = 0±40mV

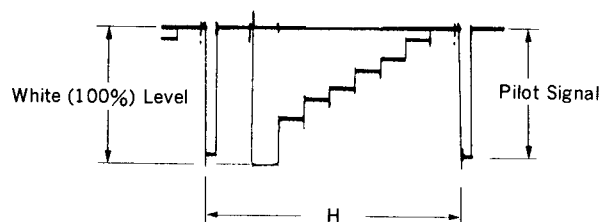


Fig. 7-13.

7-4-2. Negative AGC Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	IC303 pin ⑮
Measurement equipment	Oscilloscope
Adjustment element	RV305
Specified value	0±30mV

[Setting of Switches]

- REVERSE (NEGA/POSI) switch ON

[Adjustment Method]

- 1) Turn RV305 slowly to correspond the white 100% level to the blanking level.
Level difference = 0±30mV

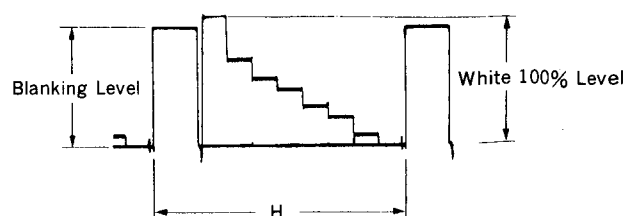


Fig. 7-14.

7-4-3. Y- γ Center Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	Q321 collector
Measurement equipment	Oscilloscope (DC range)
Adjustment element	RV302
Specified value	$-1.00 \pm 0.05 \text{Vdc}$

[Adjustment Method]

- 1) Confirm the 0Vdc level of the oscilloscope.
- 2) Adjust the Y signal lower DC level to $-1.00 \pm 0.05 \text{Vdc}$ with RV302.

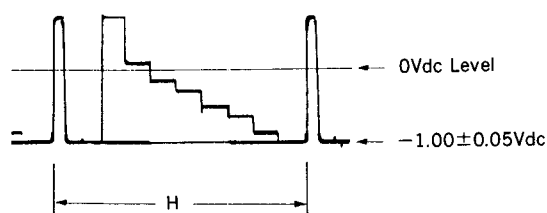


Fig. 7-15.

7-4-4. Positive AGC Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	Q343 emitter
Measurement equipment	Oscilloscope
Adjustment element	RV306
Specified value	$1.4 \pm 0.1 \text{Vp-p}$

[Adjustment Method]

- 1) Turn RV306 slowly to adjust the Y signal level to $1.4 \pm 0.1 \text{Vp-p}$.

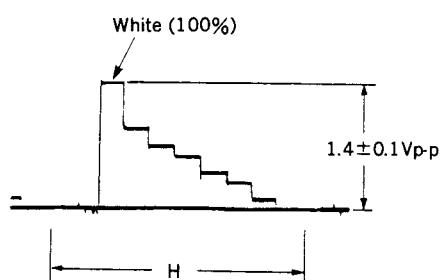


Fig. 7-16.

7-4-5. Y- γ LOW and Y- γ HIGH Adjustment (YS-6 Board)

Note: "Y- γ LOW adjustment" and "Y- γ HIGH adjustment" affect each other.

Make these adjustments until both specified values are met.

Signal	Color bar
Measurement point	CH1 : S VIDEO OUT 1 terminal pin ③ (JK-44 board W123 pin ①) CH2 : W107 pin ③ (Y BYPASS)
Measurement equipment	Oscilloscope ADD mode CH2 polarity...INVERT

- Note:** 1) This S VIDEO 1 terminal must be terminated at 75Ω .
2) make even the CH1 gain and CH2 gain of the oscilloscope.

1. Y- γ LOW Adjustment

Adjustment element	RV303
Specified value	The "cyan" and "green" levels coincide with each other.

[Adjustment Method]

- 1) Fully turn the GAMMA knob counterclockwise ($\odot$).
- 2) With RV303, make the "cyan" and "green" levels identical, and at the same time, to maximum.
- 3) Return the GAMMA knob to a center click position.

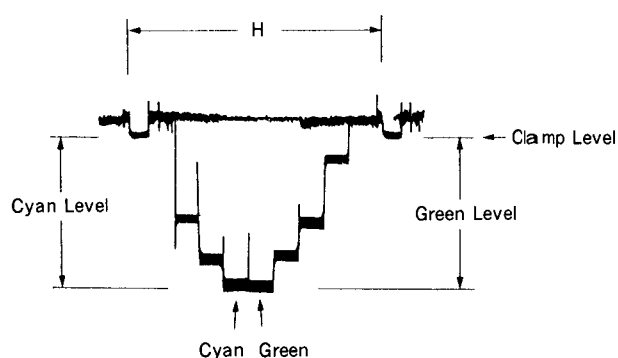


Fig. 7-17.

2. Y-γ HIGH Adjustment

Adjustment element	RV304
Specified value	The “cyan” and “magenta” levels must be equal to each other.

[Adjustment Method]

- 1) Fully turn the GAMMA knob clockwise (↻).
- 2) Viewing from the parts surface side, fully turn RV304 counterclockwise (↻).
- 3) Turn RV304 slowly clockwise to correspond the “cyan” level to the “magenta” level.
- 4) Return the GAMMA knob to a center click position.

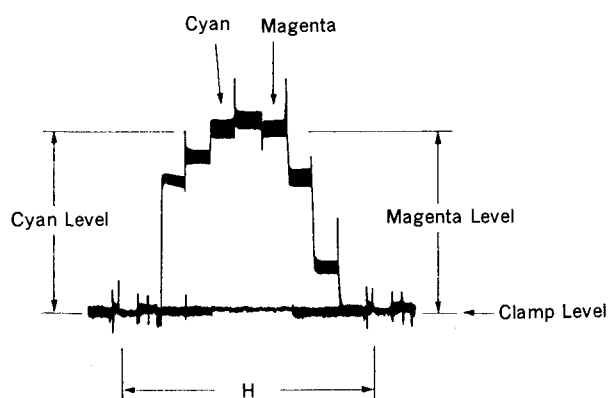


Fig. 7-18.

7-4-6. C-γ Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	IC101 pin ⑮
Measurement equipment	Oscilloscope
Adjustment element	RV101
Specified value	$0 \pm 40\text{mV}$

[Adjustment Method]

- 1) Correspond the white 100% level to the blanking level with RV101.
Level difference = $0 \pm 40\text{mV}$

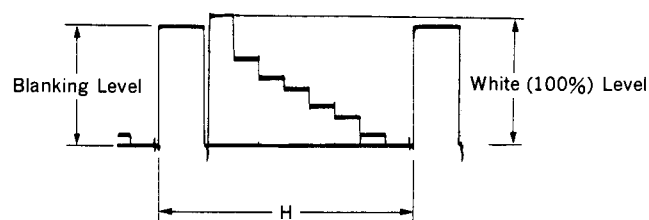


Fig. 7-19.

7-4-7. Y Level and SYNC Level Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	S VIDEO OUT 1 terminal pin ③ (JK-44 board W123 pin ①)
Measurement equipment	Oscilloscope
Adjustment element	RV315 (Y level) RV400 (SYNC level)
Specified value	$700 \pm 30\text{mVp-p}$ (Y level) $300 \pm 20\text{mVp-p}$ (SYNC level)

Note : The S VIDEO OUT 1 terminal must be terminated at 75Ω .

[Adjustment Method]

- 1) Adjust the Y level to $700 \pm 30\text{mVp-p}$ with RV315.
- 2) Adjust the SYNC level to $300 \pm 20\text{mVp-p}$ with RV400.

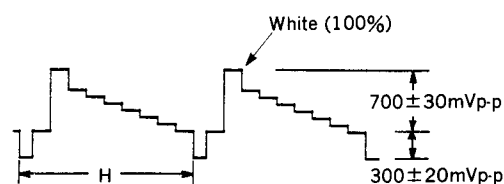


Fig. 7-20.

7-5. ADJUSTMENT OF CHROMA MAIN SIGNAL SYSTEM AND BURST SIGNAL SYSTEM

7-5-1. COLOR VR Center Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	TP007 (CN127 pin ②)
Measurement equipment	Digital voltmeter
Adjustment element	RV308
Specified value	$0 \pm 20\text{mVdc}$

[Adjustment Method]

- 1) Confirm that the COLOR knob is at a center click position.
- 2) Adjust to $0 \pm 20\text{mVdc}$ with RV308.

7-5-2. Chroma Level Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	S VIDEO OUT1 terminal pin ④ (JK-44 board W123 pin ⑤)
Measurement equipment	Oscilloscope
Adjustment element	RV317
Specified value	$664 \pm 30\text{mVp-p}$

Note : The S VIDEO 1 terminal must be terminated at 75Ω .

[Adjustment Method]

- 1) Confirm that the WHITE BALANCE and BLACK BALANCE switches are turned off.
- 2) Adjust the chroma signal level to $664 \pm 30\text{mVp-p}$ with RV317.

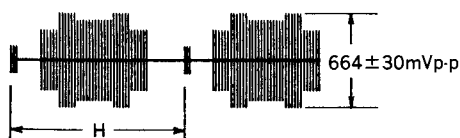


Fig. 7-21.

7-5-3. Burst Phase Adjustment (YS-6 Board) (Using the vectorscope)

Signal	Color bar
Measurement point	VIDEO OUT terminal
Measurement equipment	Vectorscope
Adjustment element	RV314
Specified value	$0 \pm 2^\circ$

[Setting of Switches]

• SPLIT SCREEN switch.....ON

[Adjustment Method]

- 1) Turn on the BYPASS switch.
- 2) Measure the chroma phase of each color bright point (particularly red and yellow).
- 3) Turn off the BYPASS switch.
- 4) Adjust RV314 so that the chroma phase of each color bright point (particularly red and yellow) will be $0 \pm 2^\circ$ against the chroma phase measured in the step 2).
- 5) Make "burst level adjustment".

7-5-4. Burst Level Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	S VIDEO OUT 1 terminal pin ④ (JK-44 board W123 pin ⑤)
Measurement equipment	Oscilloscope
Adjustment point	RV318
Specified value	$300 \pm 15\text{mVp-p}$

Note : The S VIDEO OUT 1 terminal must be terminated at 75Ω .

[Adjustment Method]

- 1) Adjust to $300 \pm 15\text{mVp-p}$ with RV318.
- 2) Confirm the "burst phase adjustment".

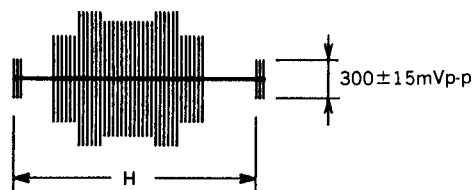


Fig. 7-22.

7-5-5. CNR Adjustment (WF-1 Board)

Signal	Color bar
Measurement point	VIDEO OUT terminal (75Ω terminated)
Measurement equipment	Vector scope
Adjustment element	LEVEL : RV201, PHASE : LV201
Specified value	LEVEL : $0 \pm 2\%$ PHASE : $0 \pm 2^\circ$

[Adjustment Method]

- 1) Turn on the CHROMA NR switch.
- 2) Adjust the level as shown in Fig. 7-23 with RV201.
- 3) Adjust the phase as shown in Fig. 7-23 with LV201.
- 4) Repeat 2) and 3).
- 5) Turn on/off the CHROMA NR switch, and confirm that the phase and the level of each luminescent spot does not change.
- 6) Turn off the CHROMA NR switch.

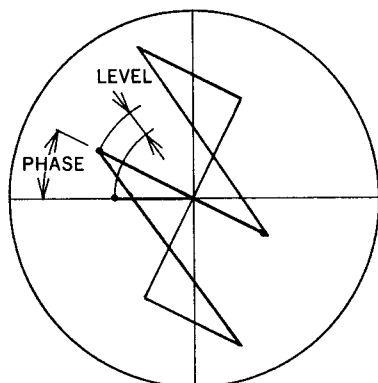


Fig. 7-23.

7-6. ADJUSTMENT OF FADER/WIPE BACK COLOR SYSTEM

7-6-1. Back Color bar Adjustment (CA-16 Board)

Signal	Optional
Measurement point	S VIDEO OUT 1 terminal pin ③ (JK-44 board W123 pin ①)
Measurement equipment	Oscilloscope
Adjustment element	RV201
Specified value	$7.2 \pm 0.2 \mu\text{sec}$

[Setting of Switches]

- WIPE PATTERN switch ☒ ON
- WIPE lever MAX (fully upward)

[Adjustment Method]

- 1) Adjust to $7.2 \pm 0.2 \mu\text{sec}$ with RV201.

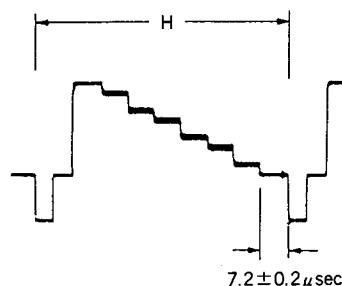


Fig. 7-24.

7-6-2. Fader/Wipe Back Color Y Level and Back Color Y Level Adjustment.

Signal	Color bar
Measurement point	S VIDEO OUT 1 terminal pin ③ (JK-44 board W123 pin ①)
Measurement equipment	Oscilloscope

Note : The S VIDEO OUT 1 terminal must be terminated at 75Ω.

[Setting of Switches]

- FADER VIDEO switch ON
- FADER BACK COLOR switch ON
- FADER lever MAX (fully upward)
- WIPE PATTERN switch ☒ ON
- WIPE lever Center
- BACK COLOR SELECT switch COLOR BAR
- VIDEO ART knob MAX (fully clockwise)

1. Fader/Wipe Back Color Y Level Adjustment (WF-1 Board)

Adjustment element	RV603
Specified value	$0 \pm 10\text{mV}$

[Adjustment Method]

- 1) With RV603, make the fader back color Y signal level correspond to the wipe back color Y signal level.

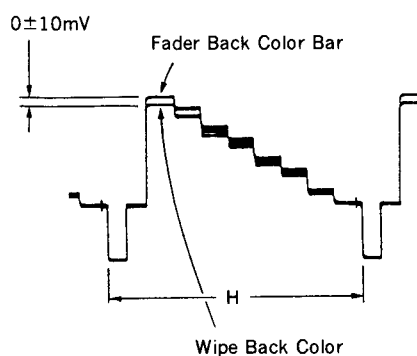


Fig. 7-25.

2. Back Color Y Level Adjustment (CA-16 Board)

Adjustment element	RV707
Specified value	$550 \pm 20\text{mV}$

[Adjustment Method]

- 1) Adjust the back color Y signal level to $550 \pm 20\text{mV}$ with RV707.

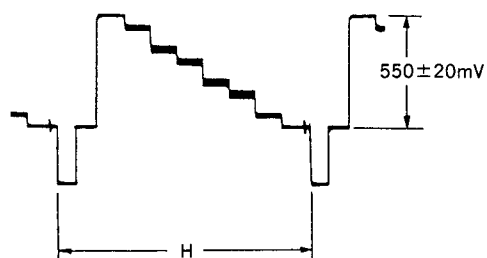


Fig. 7-26.

7-6-3. Fader White Level Adjustment (WF-1 Board)

Signal	Color bar
Measurement point	S VIDEO OUT 1 terminal pin ③ (JK-44 board W123 pin ①)
Measurement equipment	Oscilloscope
Adjustment element	RV601
Specified value	$630 \pm 30\text{mVp-p}$

Note : The S VIDEO OUT 1 terminal must be terminated at 75Ω .

[Setting of Switches]

- FADER VIDEO switch ON
- FADER WHITE switch ON
- FADER lever MAX(fully upward)

[Adjustment Method]

- 1) Adjust the Y signal level to $630 \pm 30\text{mVp-p}$ with RV601.

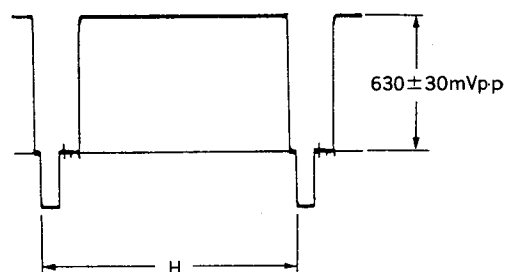


Fig. 7-27.

7-6-4. fsc Adjustment (CA-16 Board)

Signal	Color bar
Measurement point	Q702 emitter
Measurement equipment	Frequency counter
Adjustment element	CV701
Specified value	$4433618 \pm 25\text{Hz}$

[Connection]

- 1) Remove CN130.
- 2) With a $10\mu\text{F}$ capacitor, connect between the IC703 pin ⑤ and GND.
(Restore those parts mentioned above in 1) and 2).)

[Adjustment Method]

- 1) Adjust to $4433618 \pm 25\text{Hz}$ with CV701.
- 2) After completing this adjustment, be sure to make ACC peak Adjustment as described in 7-6-5.

7-6-5. ACC Peak Adjustment (CA-16 Board)

Signal	Color bar
Measurement point	Q707 emitter
Measurement equipment	Oscilloscope
Adjustment element	RV702
Specified value	Portion ㉔ : $0 \pm 40\text{mVp-p}$ Portion ㉕ : over 400mVp-p

[Adjustment Method]

- 1) Adjust RV702 so that portion ㉔ is $0 \pm 40\text{mVp-p}$ and portion ㉕ is over 400mVp-p .
- 2) Make fsc Adjustment described in 7-6-4. below.

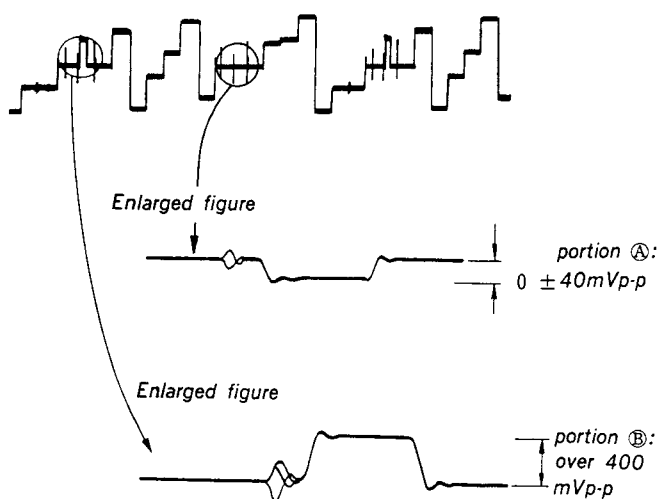


Fig. 7-28.

7-6-6. ACC Adjustment (CA-16 Board)

Signal	Color bar
Measurement point	CH1 : YS-6 board W107 pin ⑤ (C BYPASS) CH2 : S VIDEO OUT 1 terminal pin ④ (JK-44 board W123 pin ⑤)
Measurement equipment	Oscilloscope
Adjustment element	RV704 (back color chroma level) RV705 (ACC)
Specified value	$664 \pm 40\text{mVp-p}$ (at the burst level of 300mVp-p) $200 \pm 50\text{mVp-p}$ (at the burst level of 100mVp-p)

Note : The S VIDEO 1 terminal must be connected at 75Ω .

[Setting of Switches]

- FADER lever.....MAX (fully upward)
- FADER VIDEO switch ON
- FADER BACK COLOR switch ON
- COLOR SELECT switch.....COLOR BAR

[Preparation]

- 1) Prepare a semi-fixed resistor ($2.2\text{ k}\Omega$ to $4.7\text{ k}\Omega$).
- 2) Confirm that the burst level of oscilloscope CH1 is $300 \pm 15\text{mVp-p}$.
(When this value is not met, adjust the output level of the pattern generator.)
- 3) Connect the semi-fixed resistor prepared in 1) between the YS-6 board Q214 base and GND. (Use a clip, etc. for connection so that it can be removed readily.)
- 4) With the semi-fixed resistor, adjust the burst level of oscilloscope CH1 to $100 \pm 5\text{mVp-p}$.
- 5) Remove the semi-fixed resistor.

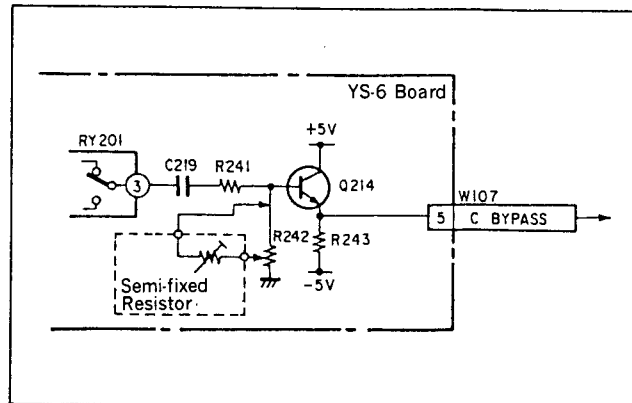
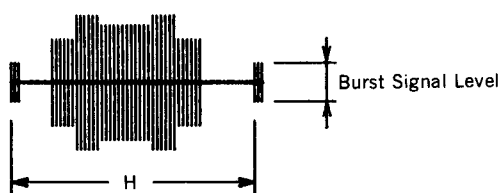


Fig. 7-29.

[Adjustment Method]

- 1) Confirm that the CH1 burst signal level is $300 \pm 15 \text{mVp-p}$.
- 2) Turn RV704 slowly to adjust the CH2 chroma signal level to $664 \pm 40 \text{mVp-p}$.
- 3) Connect the semi-fixed resistor prepared in the step 1) of [Preparation] between the Q214 base and GND.
- 4) Confirm that the CH1 burst signal level is $100 \pm 5 \text{mVp-p}$.
- 5) With RV705, adjust the CH2 chroma signal level to $200 \pm 50 \text{mVp-p}$.
- 6) Remove the semi-fixed resistor connected in the step 4).
- 7) Repeat the steps 2) through 7) until the specified value is met.

CH1 Burst Signal Level



CH2 Chroma Signal Level

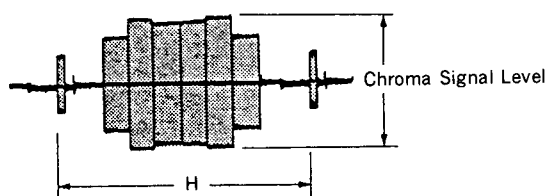


Fig. 7-30.

7-6-7. Fader/Wipe Back Color Chroma Level/Phase Adjustment (Using the Vectorscope)

Signal	Color bar
Measurement point	VIDEO OUT terminal
Measurement equipment	Vectorscope

[Setting of Switches]

- FADER VIDEO switch ON
- FADER BACK COLOR switch ON
- FADER lever MAX (fully upward)
- WIPE PATTERN switch
- WIPE lever Center
- BACK COLOR SELECT switch COLOR BAR
- VIDEO ART knob MAX (fully clockwise)

1. Fader/Wipe Back Color Chroma Level Adjustment (WF-1 Board)

Adjustment element	RV604 (level) RV602 (phase)
Specified value	$0 \pm 1\%$ (level) $0 \pm 1^\circ$ (phase)

[Adjustment Method]

- 1) With RV602 and RV604, make the color bright point for fader back color chroma correspond to that for wipe back color chroma.

2. Back Color Chroma Level/Phase Adjustment (YS-6, CA-16 Board)

Adjustment element	YS-6 board RV334 (phase) CA-16 board RV706 (level)
Specified value	Each color bright point must be within the specified frame of the vectorscope. ()

[Adjustment Method]

- 1) With RV706, place each color bright point within the specified frame of the vectorscope.
 - ※ When each color bright point cannot be put within the specified phase frame, adjust the YS-6 board RV334. After RV334 is adjusted, make "color correct phase adjustment".

7-6-8. Fader/Wipe Back Color Chroma Level/Phase Adjustment (Using the Oscilloscope)

Signal	Color bar
Measurement point	S VIDEO OUT 1 terminal pin ④ (JK-44 board W123 pin ⑤)
Measurement equipment	Oscilloscope

[Setting of Switches]

- FADER VIDEO switch ON
- FADER BACK COLOR switch ON
- FADER lever.....MAX (fully upward)
- BACK COLOR SELECT switch COLOR BAR
- VIDEO ART knob MAX (fully clockwise)

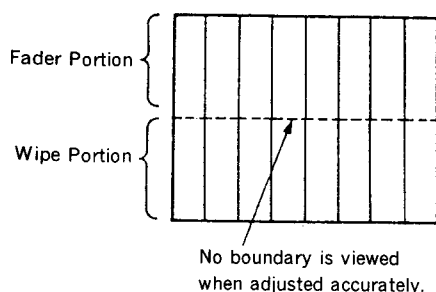
1. Fader/Wipe Back Color Chroma Level/Phase Adjustment (WF-1 Board)

Adjustment element	RV604 (level) RV602 (phase)
--------------------	--------------------------------

[Adjustment Method]

- Shift the WIPE lever to the MAX position (fully upward).
- Confirm that all the WIPE PATTERN switches are turned off, and read the chroma signal level.
- Turn on the WIPE PATTERN switch (■). With RV604, adjust the chroma signal level to the value read in the step 2.)
- Shift the WIPE lever to the center position. With RV602, make equal the hue of the upper color bar (fader color bar) and that of the lower color bar (wipe color bar) on the screen to each other.

• Monitor TV Screen (WIPE Lever at Center)



• Oscilloscope Waveform (WIPE Lever at MAX)

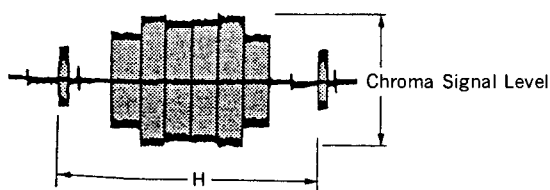


Fig. 7-31.

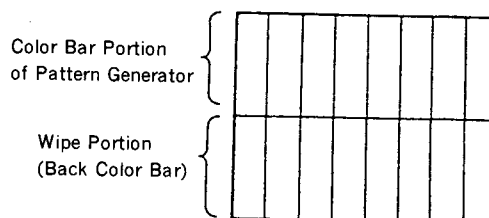
2. Back Color Chroma Level/Phase Adjustment (YS-6 and CA-16 Boards)

Adjustment element	YS-6 board RV334 (phase) CA-16 board RV706 (level)
Specified value	$664 \pm 30\text{mVp-p}$ (level)

[Adjustment Method]

- Turn off the FADER VIDEO switch.
- Turn on the WIPE PATTERN switch (■) and shift the WIPE lever to its MAX position (fully upward).
- With RV706, adjust the chroma signal level to $664 \pm 30\text{mVp-p}$.
- Shift the WIPE lever to the center position.
- With RV706, make equal the hue of the upper color bar (pattern generator color bar) and that of the lower color bar (back color bar) on the screen to each other.

• Monitor TV Screen (WIPE Lever at Center)



• Oscilloscope Waveform (WIPE Lever at MAX)

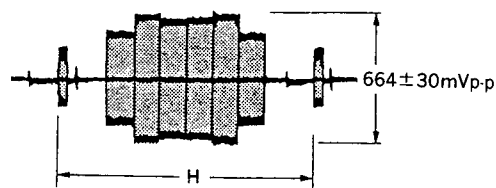


Fig. 7-32.

7-6-9. Back Color INT Mode Phase Adjustment (WF-1 Board)

Signal	Color bar
Measurement point	VIDEO OUT terminal (75Ω terminated)
Measurement instrument	Vectorscope
Adjustment element	RV991
Specified value	Chroma should be within the specified frame.

[Preparation]

- 1) Set WIPE PATTERN ☐ switch to ON.
- 2) Raise WIPE lever fully.

[Adjustment Method]

- 1) Adjust RV991 so that each chroma color comes to the center of the specified frame

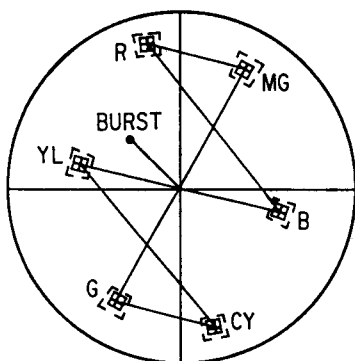


Fig. 7-33.

7-7. ADJUSTMENT OF COLOR CORRECT SYSTEM

7-7-1. Color Correct Carrier Balance Adjustment (YS-6 Board)

Signal	Optional
Measurement point	Q117 emitter
Measurement equipment	Oscilloscope
Adjustment element	RV104, RV105
Specified value	Chroma signal carrier amplitude minimized

[Connection]

- 1) Connect the Q109 collector and GND with a jumper wire.

[Setting of Switches]

- WHITE BALANCE switch ON
- WIDE RANGE (W. B) switch ON

[Adjustment Method]

- 1) Turn RV104 and RV105 alternately to minimize the chroma signal carrier amplitude.

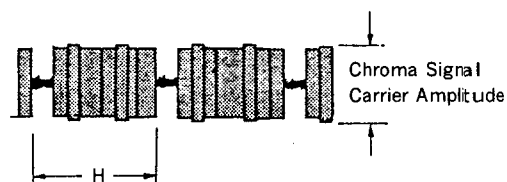


Fig. 7-34.

7-7-2. Chroma Limiter Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	S VIDEO OUT 1 terminal pin ④ (JK-44 board W123 pin ⑤)
Measurement equipment	Oscilloscope
Adjustment element	RV316
specified value	$900 \pm 50 \text{mVp-p}$

Note : The S VIDEO OUT 1 terminal must be terminated at 75Ω .

[Setting of Switches]

- COLOR knob.....MAX (fully clockwise)
- WHITE BALANCE switch ON
- WIDE RANGE (W. B) switch ON

[Adjustment Method]

- 1) Maximize the chroma signal level with the COLOR CORRECT lever.
(Shift the lever almost to its most downward position.)
- 2) Adjust the chroma signal level to $900 \pm 50 \text{mVp-p}$ with RV316.

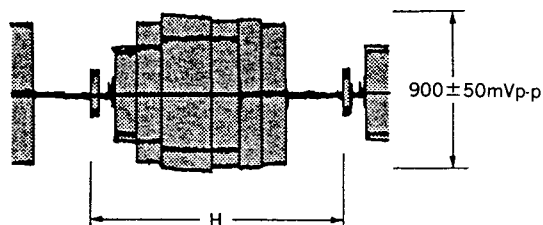


Fig. 7-35.

7-7-3. Color Correct Phase Adjustment (YS-6 Board) (Using the Vectorscope)

Signal	Color bar
Measurement point	VIDEO OUT terminal
Measurement equipment	Vectorscope
Adjustment element	RV102
Specified value	$90 \pm 4^\circ$

[Setting of Switches]

- COLOR knob MIN (fully counterclockwise)
- WHITE BALANCE switch ON
- WIDE RANGE (W. B) switch ON
- WHITE BALANCE lever Fully upward
(12 o'clock position)

[Adjustment Method]

- 1) Adjust with RV102 so that the two color bright points come together on R-Y axis.

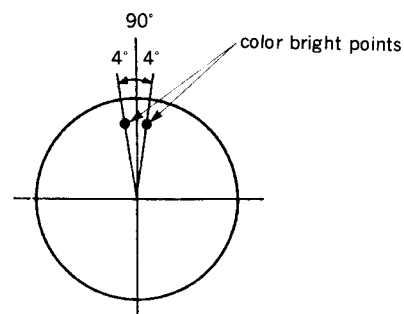


Fig. 7-36.

7-7-4. Color Correct Position Adjustment (YS-6 Board) (Using the Monitor TV)

Signal	Color bar
Measurement point	Monitor TV screen
Measurement equipment	
Adjustment element	RV102
Specified value	A color correct portion must have the same hue (magenta) as a wipe portion.

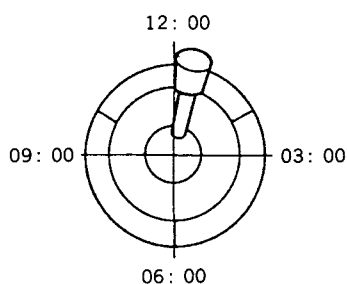
[Setting of Switches]

- COLOR knob MIN (fully counterclockwise)
- WHITE BALANCE switch ON
- WIDE RANGE (W.B) switch ON
- WIPE PATTERN switch.....
- WIPE lever Center
- COLOR SELECT switch Magenta (purple)

[Adjustment Method]

- 1) As shown in the figure below, set the left edge of the WHITE BALANCE lever to a 12 o'clock position.
- 2) With RV102, adjust the color correct portion (top of the screen) to the same hue of the bottom of the screen (magenta).

• WHITE BALANCE Lever Position



• Monitor TV Screen

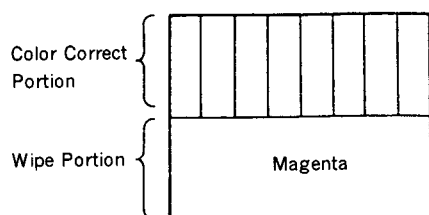


Fig. 7-37.

7-7-5. Color Correct Level Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	S VIDEO OUT 1 terminal pin ④ (JK-44 board W123 pin ⑤)
Measurement equipment	Oscilloscope
Adjustment element	RV103
Specified value	$300 \pm 10 \text{mVp-p}$

Note : The S VIDEO OUT 1 terminal must be terminated at 75Ω .

[Setting of Switches]

- COLOR knob MIN (fully counterclockwise)
- WHITE BALANCE switch ON
- WIDE RANGE (W. B) switch OFF

[Adjustment Method]

- 1) Maximize the chroma signal level with the WHITE BALANCE lever.
- 2) Adjust the chroma level signal to $300 \pm 10 \text{mVp-p}$ with RV103.

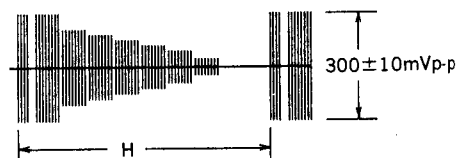


Fig. 7-38.

7-8. ADJUSTMENT OF WIPE SYSTEM

7-8-1. H RAMP Level Adjustment (CA-16 Board)

Signal	Optional
Measurement point	Q808 emitter
Measurement equipment	Oscilloscope (DC range)
Adjustment element	RV802 (lower DC level) RV801 (upper DC level)
Specified value	$1.6 \pm 0.05\text{Vdc}$ (lower DC level) $3.8 \pm 0.05\text{Vdc}$ (upper DC level)

[Adjustment Method]

- 1) With RV802, adjust the lower DC level of the H RAMP waveform to $1.6 \pm 0.05\text{Vdc}$.
- 2) With RV801, adjust the upper DC level of the H RAMP waveform to $3.8 \pm 0.05\text{Vdc}$.

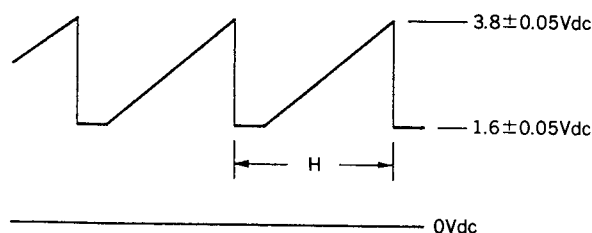


Fig. 7-39.

7-8-3. $\bar{H}$ RAMP, $\bar{V}$ RAMP DC Clamp Level Adjustment (CA-16 Board)

Signal	Optional
Measurement point	Q812 emitter
Measurement equipment	Oscilloscope (DC range)
Adjustment element	RV803
Specified value	$1.6 \pm 0.05\text{Vdc}$

[Adjustment Method]

- 1) With RV803, adjust the lower DC level of the $\bar{H}$ RAMP waveform to $1.6 \pm 0.05\text{Vdc}$.

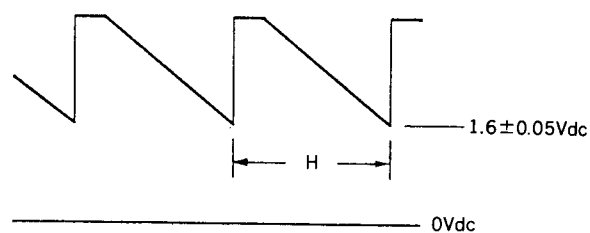


Fig. 7-41.

7-8-2. V RAMP Level Adjustment (CA-16 Board)

Signal	Optional
Measurement point	Q826 emitter
Measurement equipment	Oscilloscope (DC range)
Adjustment element	RV806
Specified value	$3.8 \pm 0.05\text{Vdc}$

[Adjustment Method]

- 1) Confirm that the lower DC level of the V RAMP waveform is $1.6 \pm 0.1\text{Vdc}$.
When the specified value is not met, make "H RAMP level adjustment".
- 2) With RV806, adjust the upper DC level of the V RAMP waveform to $3.8 \pm 0.05\text{Vdc}$.

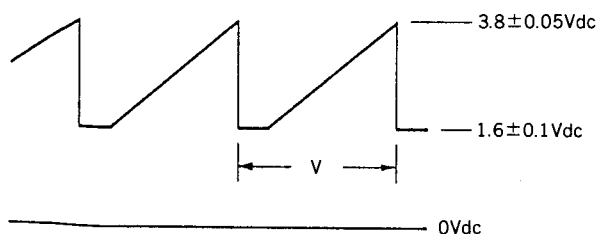


Fig. 7-40.

7-8-4. Diamond Pattern Center Adjustment (CA-16 Board)

Signal	Color bar
Measurement point	Confirm on the monitor TV screen
Measurement equipment	
Adjustment element	RV804, RV805
Specified value	$0 \pm 5\text{mm}$ (on 20-inch monitor TV)

[Setting of Switches]

• WIPE PATTERN switch ☒ ON

[Adjustment Method]

- 1) With the WIPE lever, bring the corners of the wipe pattern into contact with the monitor screen frame.
- 2) With RV804, make the right corner of the wipe pattern correspond to the vertical center of the screen.
- 3) With RV805, make the left corner of the wipe pattern correspond to the vertical center of the screen.
- 4) Make the wipe pattern smaller with the WIPE lever*¹ and confirm that it is a diamond-shaped pattern with its right and left symmetrical.

*1. A horizontal width is about 2 cm on the 20-inch monitor TV screen.

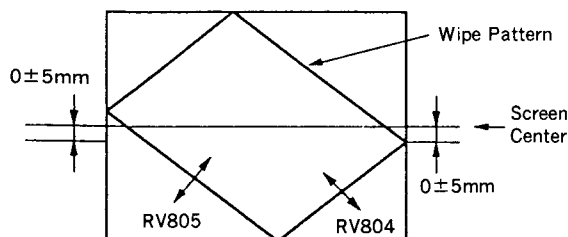


Fig. 7-42.

7-8-5. Round Wipe Pattern Roundness Adjustment (CA-16 Board)

Signal	Color bar
Measurement point	Confirm on the monitor TV screen
Measurement equipment	
Adjustment element	RV810
Specified value	$0 \pm 5\text{mm}$ (on 20-inch monitor TV)

[Setting of Switches]

• WIPE PATTERN switch ☒ ON

[Adjustment Method]

- 1) With the WIPE lever, adjust the diameter of the round wipe pattern to about 15cm*¹.
- 2) Make the round wipe pattern a true circle with RV810.
- 3) Operating the WIPE lever, confirm that the round pattern is not deformed if its size is changed. (Within a circle size of 2 to 30 cm*¹.)

* 1. Size on the 20-inch monitor TV.

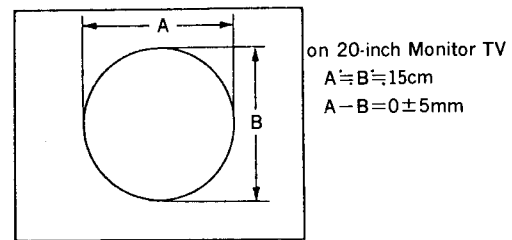


Fig. 7-43.

7-8-6. Round Wipe Pattern Position Adjustment (CA-16 Board)

Signal	Color bar
Measurement point	Confirm on the monitor TV screen
Measurement equipment	
Adjustment element	RV807(vertical position) RV808 (horizontal position)
Specified value	$0 \pm 5\text{mm}$ (vertical position) $0 \pm 5\text{mm}$ (horizontal position) (on 20-inch monitor TV)

[Setting of Switches]

• WIPE PATTERN switch ☒ ON

[Adjustment Method]

- 1) With the WIPE lever, adjust the diameter of the round wipe pattern to about 3cm*¹.
- 2) With RV807 and RV808, center the round wipe pattern with the monitor TV screen.

*1. Size on the 20-inch monitor TV.

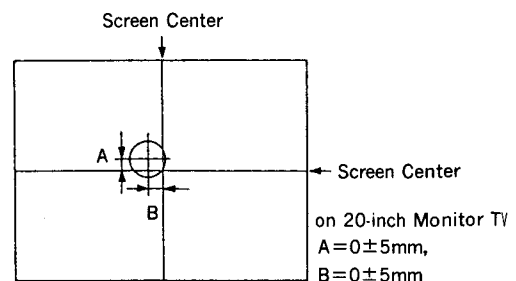


Fig. 7-44.

7-8-7. Round Wipe Pattern Size Adjustment (CA-16 Board)

Signal	Color bar
Measurement point	Confirm on the monitor TV screen
Measurement equipment	
Adjustment element	RV809
Specified value	$0 \pm 1\text{cm}$ (on 20-inch monitor TV)

[Setting of Switches]

- WIPE PATTERN switch  ON

[Adjustment Method]

- 1) With the WIPE lever, adjust the vertical size of the diamond pattern to about 10cm^{*1} .
- 2) Select the WIPE PATTERN switch .
- 3) With RV809, make the vertical size of the round wipe pattern equal to that of the diamond pattern.

* 1. Size on the 20-inch monitor TV.

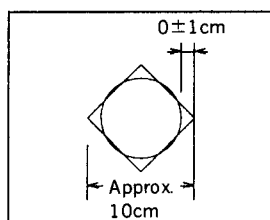


Fig. 7-45.

7-9. ADJUSTMENT OF VIDEO ART AND SPLIT SCREEN SYSTEM

7-9-1. VIDEO ART REVERSE Level Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	IC208 pin ④ (TP017)
Measurement equipment	Oscilloscope (DC range)
Adjustment element	RV201
Specified value	$0 \pm 50\text{mV}$

[Adjustment Method]

- 1) Confirm the lower DC level of the Y signal.
- 2) Turn on the VIDEO ART REVERSE switch.
- 3) With RV201, make the lower DC level of the Y signal correspond to the DC level confirmed in the step 1).
- 4) Turn off the VIDEO ART REVERSE switch.

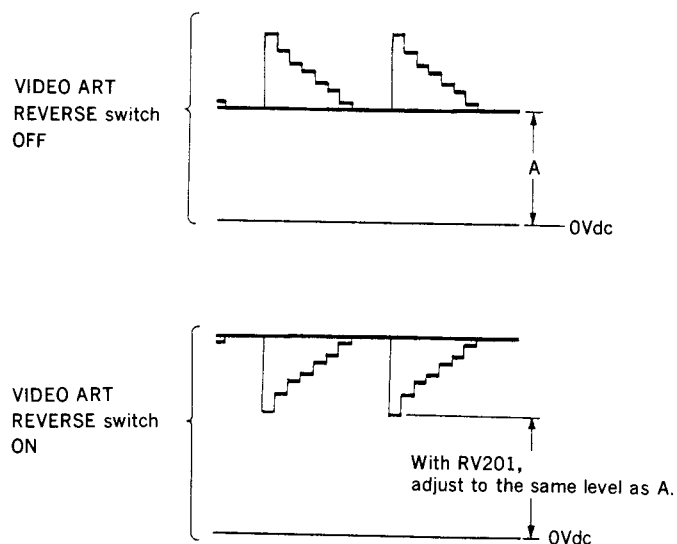


Fig. 7-46.

7-9-2. VIDEO ART VR Center Adjustment (YS-6 Board)

Signal	Color bar
Measurement point	CH1 : TP017 (IC208 pin ④) CH2 : TP018 (IC208 pin ⑤)
Measurement point	Oscilloscope (DC range)
Adjustment element	RV202
Specified value	$550 \pm 50 \text{mVdc}$

[Adjustment Method]

- 1) Set the VIDEO ART knob to its center position.
- 2) Make even the 0Vdc level of the oscilloscope CH1 and CH2.
- 3) With RV202, adjust the level difference between CH1 and CH2 to $550 \pm 50 \text{mVdc}$.

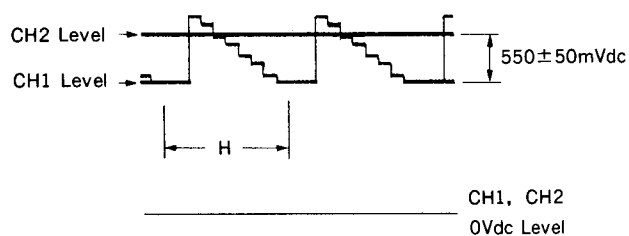


Fig. 7-47.

7-9-3. Split Screen Adjustment (WF-1 Board)

Signal	Color bar
Measurement point	S VIDEO OUT 1 terminal pin ③ (JK-44 board W123 pin ①)
Measurement equipment	Oscilloscope
Adjustment element	RV001
Specified value	$36.5 \pm 0.5 \mu\text{sec}$

[Setting of Switches]

- SPILIT SCREEN switch ON
- REVERSE (NEGA/POSI) switch ON

[Adjustment Method]

- 1) With RV001, adjust a negative/positive switching position to $36.5 \pm 0.5 \mu\text{sec}$ from a fall of H SYNC.

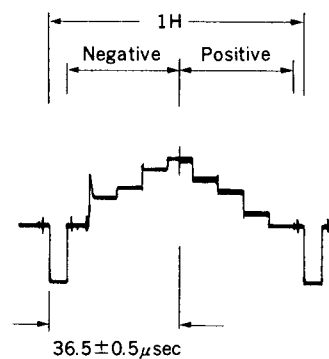


Fig. 7-48.

7-10. ADJUSTMENT OF AUDIO SYSTEM

Connect as shown below.

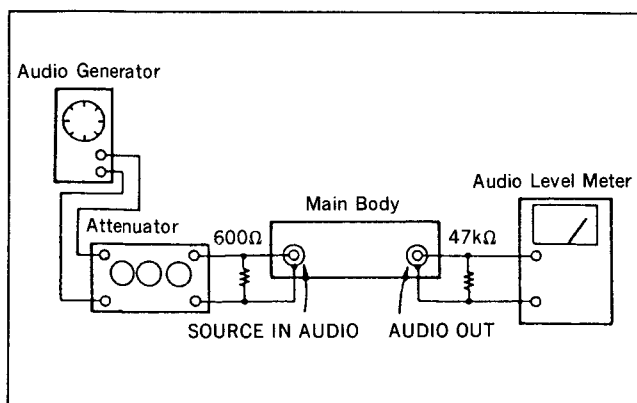


Fig. 7-49.

[Setting of Switches]

- AUDIO FADER switch OFF
- MIC level knob MIN
- AUDIO MIX knob SOURCE

7-10-1. Audio Output Level Adjustment (CA-16 Board)

R channel adjustment points are shown in [].

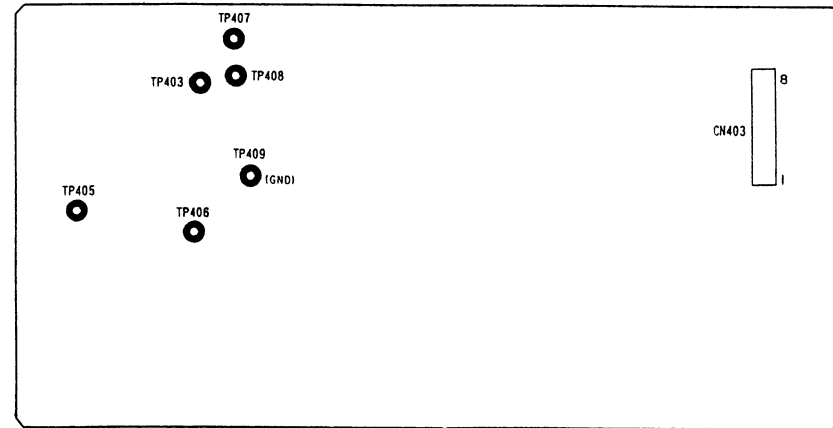
Signal	1kHz, -7.5dBs SOURCE IN terminal L [R]
Measurement point	AUDIO OUTPUT terminal L [R]
Measurement equipment	Audio level meter
Adjustment element	RV601 [RV602]
Specified value	$-7.5 \pm 0.5\text{dBs}$

[Adjustment Method]

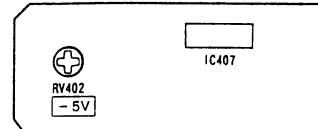
- 1) With RV601, adjust the output level to $-7.5 \pm 0.5\text{dBs}$.
- 2) Confirm that the audio output level difference between the L and R channels is $0 \pm 1\text{ dB}$.

7-11. PARTS LOCATION DIAGRAM RELEVANT TO THE ADJUSTMENT

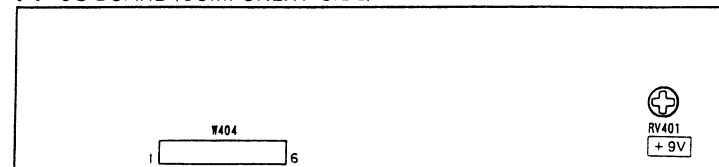
PW-61BOARD (COMPONENT SIDE)



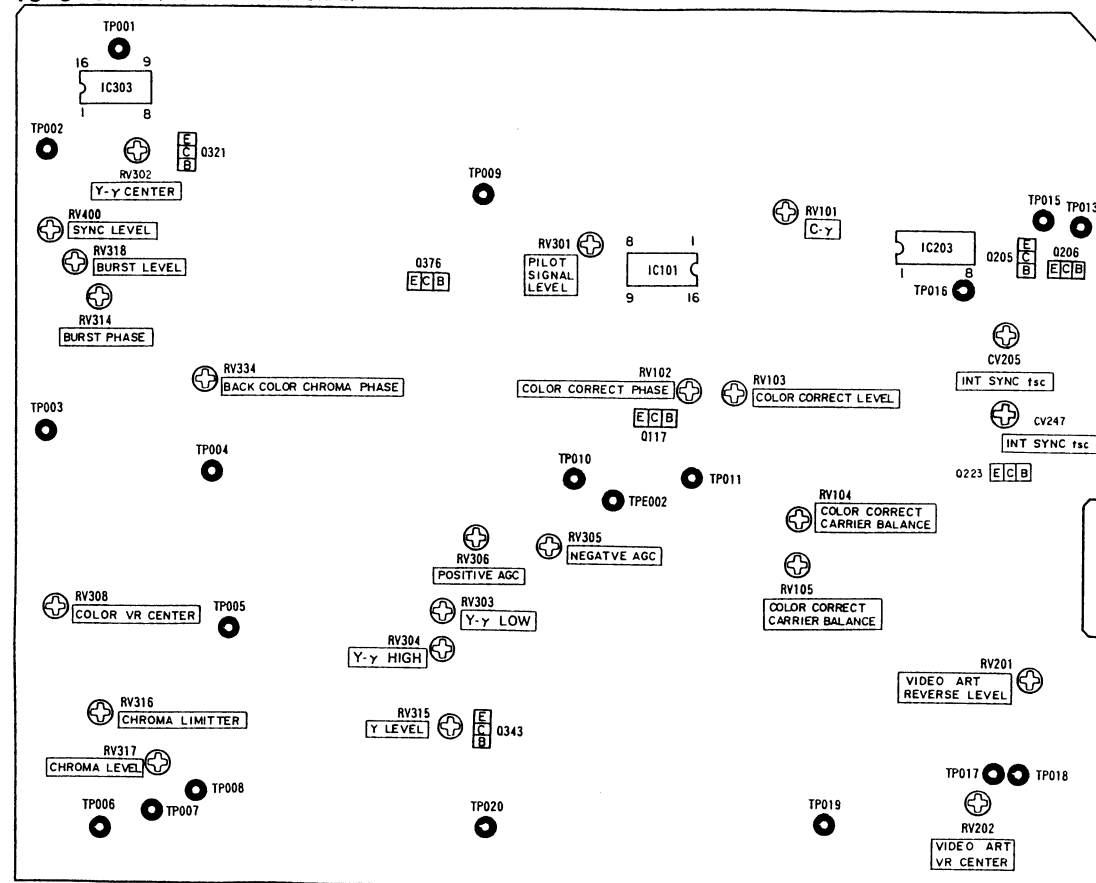
PT-70 BOARD (COMPONENT SIDE)



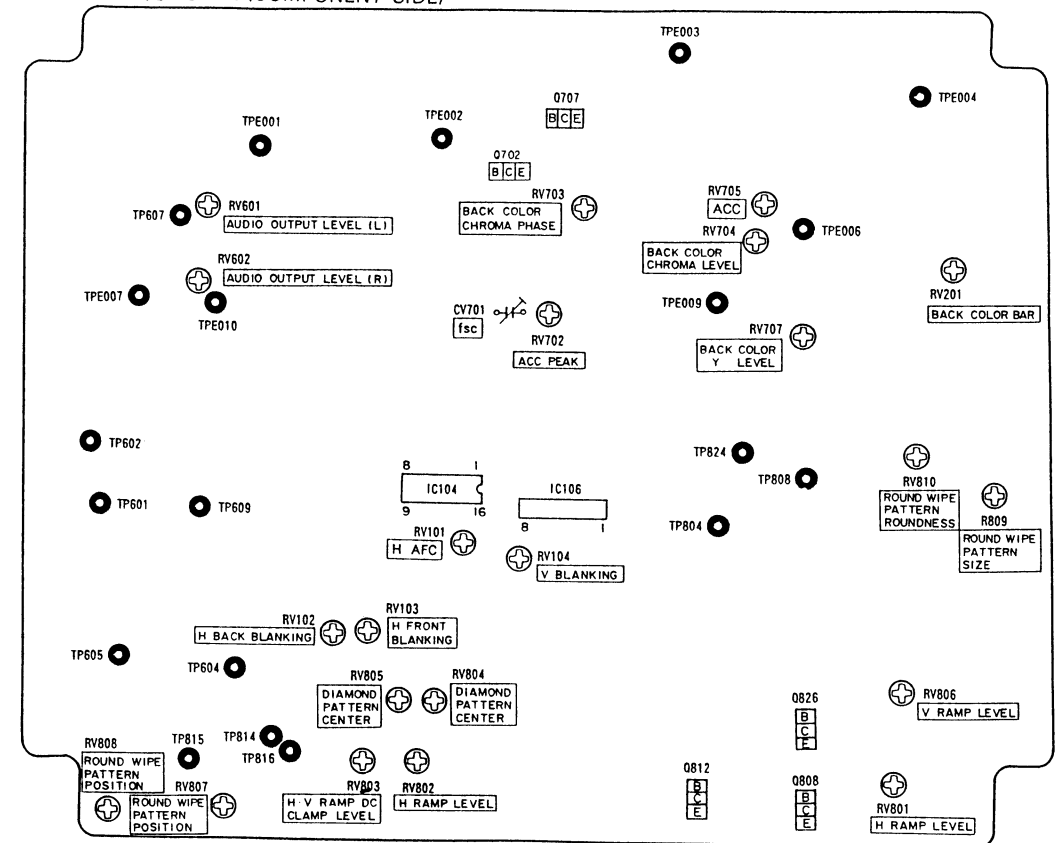
PT-68 BOARD (COMPONENT SIDE)



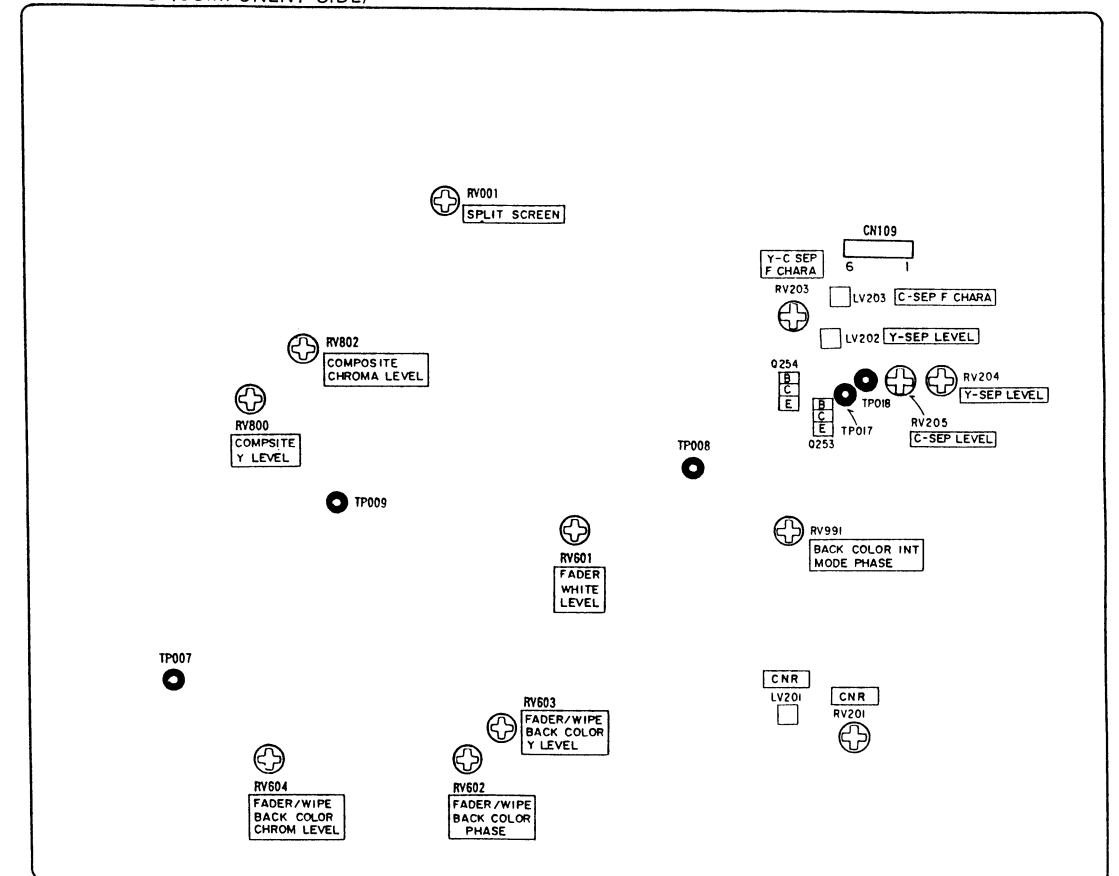
YS-6 BOARD (COMPONENT SIDE)



CA-16 BOARD (COMPONENT SIDE)



WF-1 BOARD (COMPONENT SIDE)



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